



FEBRUARY 1993



T-MARC Repeater Maps
Pages 31-35



FCC Highlights • ARRL Report • VE Exam Schedule • Public Service Report
DX Column • Elmer's Corner • Club Reports • Want Ads • Much More
Be a Know it All; Read Auto-Call

Auto-Call is the Official Journal of the Foundation For Amateur Radio, Inc.

\$1.00

THE NEW GENERATION ROTATORS

THEY'RE NOT YOUR FATHER'S HAM "M"

Rotator Comparison Chart

	The New Generation									Old Generation	
Model/Specs	Create RC5	Create RC5A	Create RC5B	Emoto 105TSX	Emoto 747SRX	Emoto 1105MSX	Emoto 1200FOX	Emoto 1300MSAX	Emoto 1800FSX	Telex HamIV	Telex TZX
Rotate Torque F/ft	43	116	160	37	50	57	143	215	287	67	83
GDr Kgm/ft Ant Inertia	N/A	N/A	N/A	100	400	700	1000	1800	3000	N/A	N/A
Brt/Static Torque F/ft	506	1085	1450	215	502	717	1290	1792	2150	417	750
Wind Load In Tower (lb)	10	25	25	11	22	27	27	33	36	15	20
Mast mount	4	5	7	5	9	12	12	15	16	7.5	10
Rotating speed 360°	60-150 sec variable	60-150 sec variable	60-150 sec variable	55	35	65	40	77	80	60	60
Rev Delay	None	2 sec	3 sec							None	None
Preset	Opt 3	Opt 3	yes	no	no	Opt	yes	yes	yes	no	no
Computer	no	no	no	no	yes	yes	yes	yes	yes	no	no
Power 120V 60Hz	80VA	140VA	200VA	70VA	70VA	70VA	90VA	120VA	150VA	26V AC	26V AC
Mast Dia.	2-2.5 in	2-2.5 in	2-2.5 in	1.2-2.4 in	1.6-2.4 in	1.6-2.4 in	1.6-2.4 in	2.4-3.1 in	3.5-5.5 in	2 in	2 in
Control wire	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	8 cond	8 cond
Vertical mast load #	880	1540	1540	660	1100	880	1760	1760	2200	400	800
Rotor w/ft	13	17	20	7.5	9	11	11	13	39.5	24	28
Brake type	worm drive	worm drive	worm drive	disk	friction	friction	friction	friction	friction	wedge	wedge
Self center mast clamp	yes	yes	yes	Adj	Adj	Adj	Adj	Adj	Adj	no	no
Special notes	3-6	3-6	3-6	6	1-6	6	2-6	6	6	4-7	4-7
Phong (\$)	\$269.00	\$449.95	\$799.00	\$209.95	\$399.00	\$589.00	\$679.00	\$1099.00	\$3272.00	\$369.95	\$439.95
With Preset	\$379.00	\$528.95				\$663.00					

Notes:

1. Turns Tribander 470° in 35 seconds
4. TZX and HamIV have same motor and gear train parts
7. 120V normal 220V special order

2. Variable speed 40 sec max
5. EEB prices as of 5/91 subject to change
8. Wind Load in Sq. Foot

3. Variable speed w/SCR constant rotational torque at any speed
6. 120/220 taped transformer

THE NEW GENERATION

An entire generation of amateurs have grown up knowing only one rotator manufacturer. Those old favorites are still popular. But, now a new generation of rotators are out to set high standards with innovative features such as: large machined steel gears, cast and machined aluminum cases, solid state controllers for smooth start/stop, preset, computer control and circular position indicators.

The bottom line is... strong, long term reliability, ease of operation and cost effectiveness. When you erect an antenna system the last thing you need is rotor problems!

CREATIVE DESIGN ROTATORS

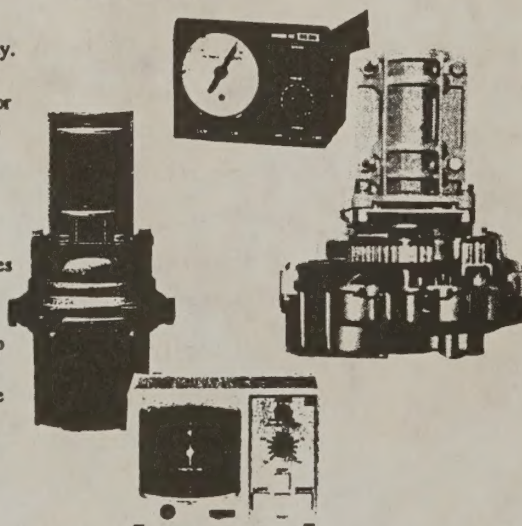
CREATE is serious about long term reliability. The CREATE RC5 series rotators were designed with the serious DX'er in mind. Three models for medium, large and ultra large antenna arrays are available.

ROTOR FEATURES OF RC5 SERIES

- * Large strong reduction gear system provides long term reliability during years of rugged operation.
- * Worm drive gearing provides powerful braking force and low backlash to keep your antenna in position during severe weather conditions.
- * Cast and machined aluminum case provide the strength required for long lasting service.
- * Mast clamp guides for ease of mast installation.

CONTROLLER FEATURES OF RC5 SERIES

- * Speed control using silicon control rectifiers allows slow speed without reduction in rotation torque. Rotating spec is constant 60 to 200 seconds per 360 degrees.
- * Reverse delay control (RDC). Delays reverse command to rotor until antenna is at rest. Prevents damage to rotor antenna and tower system.
- * Circular dial indicator, for quick accurate reading of antenna direction. Great circle overlay available for USA (west-cent-east).
- * Preset (on 3 models) a must for quick setting of antenna direction. Just turn the knob to the new heading, the rest is automatic. Won't waste your time holding down the brake lever and wait.



EMOTO ROTATORS

More than 60% of all Japan amateurs use EMOTO rotators. Many unique innovations and international patents have made EMOTO number one.

EMOTO has a fool proof method to calculate which of their rotators will satisfy your needs. This GD² formula considers your antenna (s) weight, boom and longest element length. The EMOTO sheet is in metric so one must convert weight 2.2lbs= 1kg and length in meters 3.3ft.=1 meter. Calculate your GD² then compare EMOTO GD² spec above.

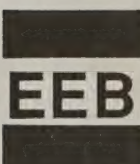
$$GD^2 = W \times \frac{L^2 + B^2}{12}$$

Where: W: weight of antenna (kg)
L: length of longest element (m)
B: length of boom(m)

GD² EXAMPLES: Kgm²

TH7DX (437), TH3JR (63), 205BA (675), DISC7-3 (1300), A3S (61), A4S (173), KLM KT34XA (378), 3 ELE TRIBAND (150), 6 ELE TRIBAND (400), 20M 5 ELE (750), 15M 6 ELE (650), 40M 2 ELE SHORT BOOM (240), 40M 2 ELE FULL BOOM (800), 80M 2 ELE (1500), STACK ARRAYS 10M 5 ELE (60), 15M 5 ELE (200), 20M 5 ELE (750), 60+200+750=1010

EMOTO also has a robust AZ-EL rotator that has computer I/O ports. For those working satellites or EME moon bounce the EV700D5X should do the job, as rotating torque is more than double the YAESU G5400B AZ-EL.



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| Anne Arundel Radio Club | National Capital DX Association |
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| Arlington Amateur Radio Club | Northern Virginia Radio Club |
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| MADRAS | Tri-County Amateur Radio Club |
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| Maryland Mobileers Amateur Radio Club | Voice of America Amateur Radio Club |
| Mercury Amateur Radio Assn., NE Area | Washington Adventist Amateur Radio Assn. |
| Metropolitan Communications Network | Washington Area Young Ladies ARC |
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AUTO-CALL

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Coming Events

1993

Feb 6	Columbia Area Amateur Club Hamfest, Lancaster, PA	
Feb 21	C-CARS Hamfest, Mechanicsburg, PA	
Feb 27	Appalacian Amateur Radio Club Group Hamfest, Lebannon, PA	
Feb 28	Vienna Winterfest™, Vienna, VA	(Page 36)
Feb 28*	Cumberland County Winter Hamfest, Cam Hill, PA	
Mar 14	York Springfest, York, PA (♦ New location this year)	(Page 51)
Mar 20-22	Virginia QSO Party	(Page 26)
Mar 21	Two Rivers ARC Hamfest, Monroeville, PA	
	Penn-Del ARC, Monroeville, PA	
Mar 27-28	Greater Baltimore Hamboree, Timonium, MD	(Page 14)
Apr 3	Chesapeake ARS, Virginia Beach, VA	
Apr 11	Easter Sunday	
Apr 11*	Penn-Del ARC Hamfest, New Castle, DE	
Apr 23-25	Dayton Hamvention	
May 1*	Kent Island Hamfest, Grasonville, MD	
May 8	FAR/QCWA Annual Spring Banquet, Greenbelt, MD	
May 9	Mother's Day	
May 9*	Roanoke Valley Hamfest, Vinton (Roanoke), VA	
May 16	Warminster ARC, Wrightstown, PA	
May 21-23	Atlantic Division Convention & Rochester Hamfest, Rochester, NY	
May 15	Armed Forces Day	
May 16	Wheeling, W. VA Hamfest (West Virginia's Largest Hamfest)	
May 21-23	ARRL Atlantic Div./NY State Convention, Rochester, NY	
May 30	Maryland FM Assn. Hamfest, Howard County Fairgrounds	
Jun 6	Ole Virginia Hams Hamfest, Manassas, VA	
	Breezeshooters Hamfest, Butler, PA	
	Tamaqua Transmitter Society, Tamaqua, PA	
Jun 20	Father's Day	
Jun 20*	Frederick Hamfest, Fredrick, MD	
Jun 26-27*	Field Day	
Jul 4	Independence Day	
Jul 3-4	ARRL West Virginia State Convention, Jackson's Mill (Weston), VA	
Jul 9-11	YLRL National Convention, Wichita, KS	
Jul 11*	Carroll County Hamfest, Westminster, MD	
Jul 17-18	Southeastern Division Convention, Atlanta, Georgia	
Jul 31	Brats Hamfest & Computer Fest, Timonium, MD	
Aug 1	Shennandoah Valley Hamfest, Berryville, VA	
Aug 13-15	ARRL National Convention, Huntsville, Alabama	
Aug 15*	Southern Patuxent Hamfest, Upper Marlboro, MD	
	Del/Lehigh ARC, Easton PA (New location)	
Aug 28-29*	Roanoke Valley Hamfest, Roanoke, VA	
Aug 29*	Hershey Park Hamfest, Hershey, PA	
Sep 12	F.A.R. Fest® 93, Gaithersburg, MD	

* Dates not confirmed

Please keep Auto-Call advised of coming Hamfests and other important Coming Events.

President's Corner

Tony Young - WA3YLO

President, Foundation For Amateur Radio

Hearts and Flowers



O.K. Guys, it's payback time for those "sweethearts" that put up with us all year long. Most tolerate us, some help us, and some even join us in the hobby. Now we get a chance in February (apart from other birthday/anniversary dates) to let them know we appreciate them. They are our life partners who: watch television through squiggly lines when we are on the air; try to sleep through loud shouts of "59" (which are really 22 conditions); try to keep dinner palatable and warm while we "QRT" four or five times.

These "sweethearts" are also the ones who make covered dishes and desserts for club socials. They play phone secretary as you shout, "ON THE AIR" when the phone rings. They bite fingernails while you drive, shift, and talk on your mike like a contortionist in the car. They apologize to visitors for the mess in "that room." They build a social life around your HF schedules and UHF nets. They provide warmth and comfort when you crawl into bed with cold feet after you finally give up trying to get through the DX pile-up.

You probably know, by now, who this person is and that she deserves something special this Valentines Day. If she likes your remembrance, tell her *Auto-Call* made you do it! If not, forget you read it here.

Our last advice? Remember, if she is not a ham, it is "no fair" to buy her a tower or a radio.

Happy Valentines day to the YL community - in and out of ham radio.

Tony - WA3YLO



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EXAMS

Montgomery County Agricultural Center
(Fairgrounds) Gaithersburg, Maryland

FCC Highlights

by Jack Kelleher - W4ZC

Proposed VHF/UHF Changes in FCC Rules

In response to three unrelated petitions, the Commission has issued a Notice of Proposed Rulemaking (PR Docket 92-289) which would:

- (1) Create a small new "weak signal" subband (222.0 - 222.15 MHz) where repeaters would be prohibited;
- (2) Authorize frequency privileges to Novice Class operators in the entire 222-225 MHz band;
- (3) Allow Novice Class operators to be licensees and control operators of repeaters in the 222-225 MHz band as well as in the 1270-1295 MHz segment of the 1240 -1300 MHz band.

The Commission said it believed there was merit in the petitions and asked for comments on the proposed rule changes. "They offer improvements in the operational standards for the amateur service. The availability of a small protected subband at 222.0-222.15 MHz would facilitate experimentation. Permitting Novice Class operators to be licensees and control operators of repeaters and authorizing them additional frequency privileges would provide an opportunity for Novice Class operators to become proficient in a wide variety of amateur service operations. They would also have more flexibility in selecting the mode of transmission. Choosing the appropriate mode would result in a more efficient use of available spectrum. Comments are invited on the effect that the proposed changes would have on Novice Class licensees."

The FCC noted that they "...amended the amateur service rules in PR Docket 90-55 (The codeless Technician Class proceeding) based on, among other things, the amateur community's view that the Novice Class operator license is needed as an entry level for persons who cannot pass the more difficult written examination for the Technician Class license, but who can pass a slow-speed telegraphy examination. Comments are also requested, therefore, on the effect that the proposed changes would have on the current amateur operator license class structure." (Thanks W5YI Report December 15 and ARRL Letter December 24)

Processing license Applications.

According to John Guili, Chief of the Commission's Washington DC Computer Applications Division, the FCC will be upgrading its information systems infra-structure in early 1993, both hardware and software. A new Amateur Licensing System is scheduled for implementation during the first quarter of 1993. The FCC plans to move the existing mainframe, batch-oriented system to a local area network (LAN) based client-server architecture capable of accommodating both paper and electronic filings from the Volunteer Examiner Coordinators (VECs). The new system will be tested later on in 1993 and plans are to have the VECs file Form 610 applications electronically starting in early 1994. Guili said he envisions the new process will be similar to accessing a computer bulletin board with its menu of functions -- including uploading of Form 610 information. This should greatly speed up issuance of Amateur Radio operator licenses. (Thanks W5YI Report December 15)

The new broom is sweeping.

It is understood that Chairman Sikes of the Federal Communications Commission has submitted his resignation effective January 19, 1993, the day before the new Administration takes office. According to the W5YI Report of January 1, 1993: "The big question is who will be the next FCC chairman. We have heard all sorts of names mentioned including present Commissioners James Quello and Ervin Duggan. While supposedly an independent agency, the FCC usually adopts the agenda of the administration. What direction the Clinton administration will take on amateur radio is anyone's guess. One thing for sure, ham radio has never been a high priority item at the commission. Commissioner Sherrie Marshall will also be replaced, since President Bush did not reappoint her.

FCC BBS. The FCC operates a computer bulletin board open to all. Running at 300-1200 baud, the number is (301) 725-1072. It provides many features, including a database that holds records on manufacturers and the equipment they submit to the FCC for approval.

FCC Highlights - Continued

Because many electronic devices are potential RF transmitters, they must be submitted to and approved by the FCC. Each unit is issued a number. Many electronic technicians use this FCC ID number to track down the manufacturer of a certain product. Also available on-line are public bulletins, operational information on the laboratory, information on how to apply for equipment authorization, and latest rulemakings. The BBS allows each user six minutes per call. (Thanks W5YI Report January 1, 1993)

Irregularities: An item in Auto-Call for June 1992 under the foregoing title reported on alleged irregularities in VE testing in the Los Angeles area. The following item, from Westlink for November 27, puts a different light on the incident.

"Charles Pascal, WB6CIY, and Sandra Crane, N6TFO, have filed an "Equal Access to Justice" claim against the United States Government in connection with the recent "sting" operation that resulted in proceedings against them by the FCC. Pascal described the action to recover some of the expenses the pair incurred in mounting their defense.

"In late September, Pascal and Crane were successful in thwarting an action that sought the permanent revocation of their amateur radio licenses. The FCC pursued the case based solely on allegations made by the American Radio Relay League's Los Angeles Official Observer Corps.

"An Equal Access to Justice claim provides an avenue of reimbursement to defendants in cases brought by the government where insufficient evidence is brought forth to effect a conviction. In the original case against WB6CIY and N6TFO, the FCC Administrative Law Judge was critical of evidence submitted to the court by the government. In a pretrial hearing that led to a consent decree, ALJ Chachkin directed the FCC to investigate those who brought the charges against Pascal and Crane to determine whether the FCC, itself, had unknowingly become a party to a vendetta against the pair.

"According to Pascal, his Washington DC attorney George L. Lyon Jr. hopes that a favorable ruling on the request may be forthcoming in sixty to ninety days.

"It is believed by some that this may be the first in a long line of legal actions expected to be brought by Pascal and Crane against their possibly now-discredited accusers.

The December 10 Westlink Report contains a related item entitled "ARRL to clamp lid on OO Program" which states: "It appears that the American Radio Relay League is about to clamp the lid on the "super cops" in its Official Observer and Amateur Auxiliary programs. According to an in-depth report to the League's Executive Committee by the Ad-Hoc Committee on the Amateur Auxiliary, the time has come to revise the concept of the Regional Monitoring Station to make it clear that the Amateur Auxiliary was and is only authorized to deal with on-the-air monitoring for rules violations and nothing else.

"The "Dog" nailed. "A Notice of Apparent Liability to Monetary Forfeiture has been issued pursuant to Section 503(b) of the Communications Act of 1934 (as amended) to Michael E. Whatley - WA4D, for "wilfully and maliciously causing interference to other operations in the amateur radio service..."

"Whatley, of Alexandria Virginia, is known on the ham bands by his self-assigned nickname "The Dog", for "W-A-4-Dog". On November 17, 1991 the FCC's monitoring station in Allegan, Michigan, monitored and traced a series of interfering transmissions to Whatley's amateur station. The Commission says that Whatley deliberately used these signals to interfere with the communications of other amateur operators on 7257 and 7258 kHz. These transmissions continued throughout the period from 9:03 a.m. to 9:52 a.m. The FCC says that WA4D "wilfully operated on frequencies which he knew were being used and harassed other operators with rude and insulting communications. Mr. Whatley identified himself with his call sign, WA4D ("Willy Able Four Dog") during his communications. When other operators tried to switch frequencies, Mr. Whatley followed them onto the new frequency and continued to harass them" the FCC says.

Whatley was fined \$4,000 for these alleged regulatory violations, but in keeping with the Forfeiture Guidelines set out in the Commission's Policy Statement "Standards for Assessing Forfeitures," the amount was reduced by \$2,000, to \$2,000. The FCC says that no

FCC Highlights - Continued

further adjustments appear warranted in this case. Whatley is expected to file an appeal.

Spectrum Requirements for the Amateur Service. Our September 1992 column mentioned an NTIA (National Telecommunications and Information Administration) Notice of Inquiry which, among other things, asked for comments on the future spectrum requirements for the amateur radio service.

ARRL's response to the NOI, based in part on a position paper prepared by the Administrative Council of the International Amateur Radio Union (IARU) prior to WARC-92, cites these specific needs:

- A new shared allocation in the vicinity of 190 kHz (A new LF allocation, for experimentation);
- Retention of 1.8-2.0 MHz (The Amateurs' only MF band);
- A common worldwide exclusive allocation of at least 300 kHz in the 3.5-4.0 MHz band, and retention of the additional shared allocation in Regions 2 and 3;
- A new narrow, shared allocation in the vicinity of 5 MHz;
- A 300 kHz wide exclusive allocation in the vicinity of 7 MHz;
- Expansion of the present secondary allocation of 10.1-10.15 MHz to a primary allocation of 250 kHz;
- A return to the pre-1947 20-meter allocation of 14.0-14.4 MHz;

- An exclusive allocation of 250 kHz at 18 MHz;
- Retention of the band 21.0-21.45 MHz;
- Widening the 12 meter band from 100 to 250 kHz
- Retention of the band 28.0-29.7 MHz;
- A narrow band of frequencies between 30 and 50 MHz;
- Retention of the band 50-54 MHz where it now exists, and an allocation of at least 2 MHz in other geographical areas, with at least 500 kHz on an exclusive basis;
- For both the amateur and amateur satellite service, retention of 144-146 MHz as a worldwide exclusive allocation with elimination of existing footnotes that allow operation by other services in some countries, and retention of the band 146-148 MHz in Regions 2 and 3;
- Retention of 222-225 MHz, and access to part of the band 216-220 MHz; or upgraded access to present bands near 400, 900, 1200, 2300, 3300, and 5650 MHz, and at 10 and 24 GHz, for both terrestrial and satellite uses;
- In addition, any modifications in Government primary allocations should either leave the amateur secondary allocations unchanged or provide for alternative spectrum.

We wish you all a Happy New Year, and resolve to spend more time on the air in 1993.

✕ ✕ ✕

FRUPAC Amateur Radio Operators Net

The FRUPAC Amateur Radio operators' Net has been in operation since 1973 and now has a roster of over 900 former shipmates with over 775 holding ham calls.

The unclassified acronym "FRUPAC" (Fleet Radio Unit, Pacific) was selected as an identifiable title to commemorate that most successful WW-II organization and its supporting personnel. The prime objective of this group is to utilize ham radio to locate Regular or Reserve veterans of the U.S. Naval Cryptologic organization and to provide them with an organized and convenient means of establishing and maintaining contact with former shipmates from the comfort of their own homes. This is done by scheduling a variety of radio nets that meet regularly on the Amateur bands.

FRUPAC is a part of the Naval Cryptologic Veterans Association (NCVA) and there is a local group in the Washington area, under the title Capital Region NCVA. There is no charge for joining the local group, however, membership in the Naval Cryptologic Veterans Association is a prerequisite. For further information about FRUPAC and/or NCVA, contact Ken Mann - N3GKE (301) 933-3785 in Rockville, Maryland.

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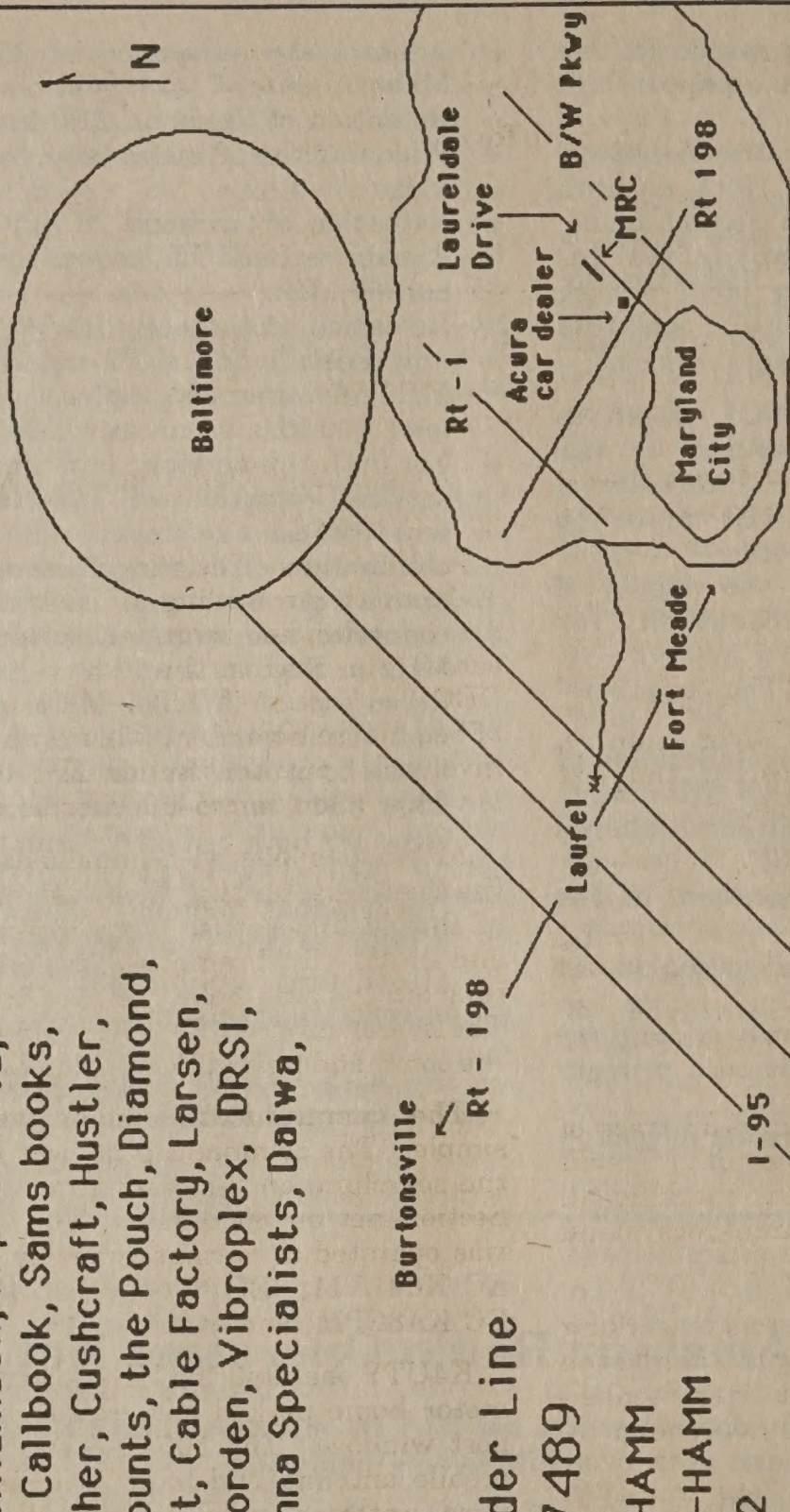
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American Radio Relay League Report

By John Swafford -- W4HU

This ARRL Report provides a brief summary of information published in the ARRL LETTER and other reports. The LETTER provides timely news of interest to active Radio Amateurs. Any League member may subscribe to the ARRL LETTER.

Amateurs Respond to Sheriff's Call, Help in Successful Search Operation.

By Geo. Thurston, W4MLE
ARRL N. Florida SEC

More than 50 Amateurs in northern Florida participated in the successful search for a missing youngster last month.

Nine-year-old Kassie Sparkman disappeared Sunday afternoon, Nov. 8, 1992, while her mother chatted with friends near Friendship Baptist Church in Suwannee County in Northern Florida's Suwannee River country. One moment she was playing nearby; the next moment, she was nowhere to be seen.

At first, no one was seriously concerned. The disabled girl often wandered and played alone in her neighborhood in the rural farming county. So when Sandy Sparkman finally asked Sheriff Bob Leonard for help in finding her daughter, Kassie already had been missing for hours.

A hastily-mounted search found no trace of the girl before dark. Monday morning, Sheriff Leonard had dozens of searchers checking all the likely places. No luck. Search dogs found her trace several times and then lost it.

Tuesday found nearly 100 searchers working their way across the flat, sandy landscape nestled into a wide bend of the river Stephen Foster made famous. Still no sign of the girl.

Early Wednesday morning, Veteran's Day, Sheriff Leonard called Jonathan Jackson - KB4JAY, ARRL Emergency Coordinator for nearby Hamilton County, to request communications help from the Amateur Radio Emergency Service. Leonard was unaware that Dave Klemp - KM4DB had been appointed EC of Suwannee County just two days earlier. Dave had taken over a county with no existing ARES organization. What a great scheme for on-the-job training! [Dave Klemp worked in the technical department at ARRL Headquarters in the 1970s --ed]).

Jackson and Klemp quickly found each other and went to work.

As Suwannee District EC Arthur Birdsall - KO4DR, began feeding in ARES members from nearby counties, more volunteers came from across the river in the Capital District, where DEC Ted Zateslo - W1XO, had been dragged out of bed before breakfast. Since two districts were involved, I put the Section HF ARES net on a low-level alert to provide coordination.

ARES members with handhelds accompanied the searchers, busting their way through stands of thorny underbrush, scrub pine, scrub oak and smilax-vine brambles, frequently detouring to avoid the sink holes that dot the entire area. The searchers used 2-meters simplex to talk to the command post at Friendship Baptist Church.

The communication plan was classically simple: The command post kept in touch with the searchers on 2-meters and with the ARRL Section net on 3950 kHz. The CP2-meter rig was operated at various times by Dixie County EC KC4LVM; EC KM4DB; Gilchrist County EC KA8CPM; and others.

K4UTY operated the HF station from NF4O's motor home parked just outside the command post window. The 100-watt rig first used the mobile antenna and later switched to a G5RV wire antenna provided by W1XO, greatly improving the signal. K4UTY and NF4O spent three nights in the motor home.

As an additional gateway between the two nets, Billy Dodd - WA4QHE, in Chiefland, monitored both the HF net and the 2-meter search net. Billy played a key role in the operation. His powerful HF signal and his 2-meter pipeline to the command post continued from breakfast to sundown on Thursday and Friday and popped up at critical times on other days as well. The VHF net was the key to the

ARRL Report - Continued

Amateur Radio operation. New waves of operators recruited from Tallahassee, Gainesville, Jacksonville and many points in between, stomped through terrain like none they had seen since they were Boy Scouts.

Lines of searchers on foot, nearly a mile long and spaced only a few feet apart, were interspersed with hams bearing hand-held radios. They couldn't avoid the briars; they simply crashed through them. Many searchers and hams suffered torn skin and tattered clothing.

Other searchers in 4-wheel-drive vehicles and conventional trucks, vans and cars also prowled the graded sand-clay roads and unimproved sand roads that lace the countryside. New teams of search dogs snuffled through new areas in search of Kassie's scent. They found nothing.

Special teams of divers, called in from as far away as Orlando and St. Augustine, probed the sink holes, most of them half filled with water the color of very strong coffee. Many were cluttered with discarded household trash. The teams found no trace of Kassie.

At night, all searchers were pulled out of the field. Overhead, an Army National Guard helicopter swept the ground with infra-red night-vision equipment. It was said to be sensitive enough to spot anything even slightly warmer than the surrounding ground. But it found no trace of Kassie.

Hopes for finding Kassie alive began to wither. The weather, which had been mild up to then, with daytime temperatures in the high 60s, turned nasty. A steady cold rain soaked the area all day Thursday, and well into the night.

Detailed weather forecasts from the National Weather Service in Tallahassee called for Friday night temperatures to drop into the low 30s, with frost or freezing possible in low spots.

Found at Last!

Late morning on Saturday, six days after Kassie's disappearance, NF4O decided to add an amplifier to the HF rig at the command post. While his station was down, word flashed through the 2-meter net, Kassie was found! Kassie was alive!

WA4QHE's HF-VHF gateway station was not on at the time, but I happened to be talking to Madison County EC WD4ODB through the Perry repeater on 146.97, and Pat was listening to the command post on 2-meter simplex on another rig.

I restrained my impulse to grab my HF mike and pass the word. What Pat heard was not confirmed. I bit my lip and waited. In another moment or two Pat came back on the repeater. The word was official. It came from the deputy sheriff who found Kassie, cold, undressed, but alive.

I pressed the key on the HF rig and passed the news along to the Section Net. The surge of relief and joy was almost tangible. I thought I saw the S-meter rise another few dB as the news soaked in.

Kassie had been discovered by a horse-mounted search team with no Amateur operator attached. The first word had flashed over the sheriff's radio, where it was picked up in the command post.

Kassie had been sitting on the ground, nude, in a stand of planted pine trees, more than a mile from the nearest road and more than five miles from the command post.

Rushed to a Gainesville hospital, she was reported in good condition, suffering only dehydration and mild hypothermia, despite six days in the open with little or no food and only what water she could find.

Unfortunately, Kassie's disability prevents her from using speech or language of any kind. As her mother put it, during a TV news interview. "We'll never know what that poor little girl went through in all that time."

And we will never be able to measure how much the services of ARES members contributed to the success of the search. We are sure that the effort had to be made, and would be made again under similar, or worse, circumstances.

We have identified 52 ARES members who took part in various phases of the radio operation but no doubt there were more. The efforts of all are equally appreciated, whether they spent many hours at their radios, drove from place to place, busted brush in Suwannee County, or hustled recruits on the telephone.

ARRL Report - Continued

Shuttle Flight to Feature Receive-Only Experiment. The next Shuttle flight carrying Amateur Radio, scheduled for late March, plans a special event to allow virtually every Amateur in the southeastern U.S. to participate.

Flight STS-55, scheduled for launch March 25, will include an antenna measurement test on 2-meters, during Orbits 61 and 62 about a week into the flight. During Orbit 61, the shuttle crew will transmit a test signal using the SAREX antenna positioned in its usual spot in one of the orbiter's windows.

On the next orbit, the crew will transmit with the external German SpaceLab antenna.

Listeners on the ground will be asked to observe both passes and to record signal strength from the Shuttle. Reports later will be analyzed by members of the Motorola Amateur Radio Club in Plantation and Boynton Beach, Florida.

During Orbits 61 and 62 the Motorola groups will record absolute field signal strength in two polarizations versus time as the Shuttle passes from horizon to horizon over their Florida locations.

Following the mission, the Motorola group will use precise orbiter position data from NASA in their analysis of the two Amateur Radio antennas under test.

The path of the shuttle will limit the experiment to Amateurs from approximately southern Louisiana through parts of Mississippi, Louisiana, Georgia, and Florida.

To participate, you'll need a kit from the ARRL Educational Activities Department, available from HQ for a large SASE. You will be asked to report back information on your equipment and location as well as your signal strength observations.

February QST will carry more information and the usual news outlets (W1AW and WA3NAN) will carry last-minute bulletins as the flight nears.

Briefs.

o Minnesota brothers and fellow Amateurs Gary and Stanley Johnson have been credited with saving the life of a hunter.

In early November 25-year old William Tripett accidentally shot himself in the chest while deer hunting in a remote area near Bemidji, in north-central Minnesota, according to newspaper accounts. When his hunting partner found him 30 minutes later, Tripett was in shock from loss of blood.

The other hunter went for help and found Stanley Johnson - NØHKC, of nearly Coon Rapids, according to the Bemidji Pioneer. Johnson radioed his brother Gary - NØFZP, who contacted authorities.

Gary Johnson told the Pioneer that his brother "always keeps a radio in his car, but has never run into an emergency like this." He told the paper that a new repeater enabled Amateurs in Bemidji to communicate with others as far away as Minneapolis, Fargo and Winnipeg.

o Canadian Amateurs report that progress is "slow but steady" in the merger of the Canadian Radio Relay League and the Canadian Amateur Radio Federation. Lawyers and accountants are finishing their work and the two groups expect to be merged into Radio Amateurs of Canada by mid-1993, according to Bruce Balla - VE2QO, of the CRRL.

Meanwhile, both organizations are working to ensure Canadian Amateurs' antenna rights. Although the Radio communications Act gives Communications Canada control over antenna installations, some municipalities are enacting bylaws which attempt to override this jurisdiction, according to Balla, who calls these local regulations a "serious threat to radio-communications in Canada."

o The Military Affiliate Radio System (MARS) has been handling holiday and greetings messages from troops in Somalia to their families in the U.S. At present, according to MARS officials, it is difficult to send messages to Somali-based troops as soldiers there are constantly on the move.

✕ ✕ ✕

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Public Service Report

Hank Black - N3ESR

(301) 340-8595

Material for the PUBLIC SERVICE REPORT can be left to N3ESR on the WA3ZNW packet bulletin board on 145.090 MHz, called by telephone, or mailed electronically by modem on arrangements, or mailed to Public Service Report, 105 North Van Buren St., Rockville, MD 20850-1860.

Deadline for receipt of material is the third of the month.

SVEARS CALLED UP FOR EMERGENCY COMMUNICATIONS

On Friday morning, December 11, 1992, the Shenandoah Valley Emergency Amateur Radio Service (SVEARS) was requested to provide emergency communications to the northwestern part of Frederick County, VA.

Due to the extremely heavy amount of snow and the loss of power and telephone service to many homes in the area, an evacuation shelter was setup at the Indian Hollow School, and a coordination site was set up at the Reynolds Store Volunteer Fire Department. The school had power but the fire station did not. A link was set up between the two locations and remained in place until the evacuation shelter was secured. Members of SVEARS then reported to the Frederick County Emergency Operations Center (EOC) and maintained a secondary means of communications between the fire station and EOC until all operations were secured.

During the operation, members of SVEARS also provided weather reports to SKYWARN, assisted with the searching of vehicles reported to be stranded in deep snow (in excess two feet in some areas), and transported stranded citizens to various locations.

While the event was not as severe as initially predicted, the potential for large scale evacuation existed had the power continued to remain off for an extended period. This prospect already sent some residents to the evacuation shelter. Once the storm let up, crews restored most of the power. Almost all of the sheltered citizens then returned to their homes.

Thanks to the stations that participated with WD4RPV in this event or were instrumental in getting things organized: KD4GDY, N4VJK, KD4JBY, N4HCQ, AB4BY, KD4IEW, KD4EPZ, KD4BHV, KD4IET, N4NDQ, N4TBM, N4TRX, KD4ENQ, WA4HVV, KD4HRI, & KD4IEV.

-Submitted by Sean McClanahan - WD4RPV, Operations Coordinator, SVEARS

SKYWARN ACTIVATED FOR MAJOR WINTER STORM

On December 10, 1992 a winter storm threatened the Atlantic Region and the SKYWARN Amateur Radio Network was called into action. This was no ordinary winter storm! This was one of the most powerful winter storms of recent history with snow measured in feet in some areas of western Maryland and the Potomac Highlands of West Virginia. The National Guard was activated to assist with evacuations due to closed roads and widespread power failures which lasted for many days in some areas.

The storm's impact on the National Capital Area was extremely difficult to predict. The actual snowfall accumulation was dependant upon the timing and interaction of a deep low pressure system coming from the midwest and a secondary low pressure system coming up the Atlantic coast. Areas in the east received several inches of rain while the northwest received a few feet of snow, with Garrett County, Maryland reporting over three feet of snow.

(Continued)

Public Service Report - Continued

While the metropolitan area experienced between two and three inches of snow during the storm (most of which melted shortly afterwards), the impact could have been far different had the coastal low pressure area been 50 miles to the east. Not far in meteorological terms!

By all accounts, the SKYWARN volunteers did an outstanding job of spotting and reporting the severity of the storm in a professional and efficient manner. These reports assisted the National Weather Service in its mission of saving lives and property through the issuance of timely and accurate watches and warnings.

A number of critical reports of severe weather were made by SKYWARN trained spotters. Two reports stand out. On December 10, 1992, three spotters indicated that severe flooding conditions were occurring. On the afternoon of December 11, 1992, a SKYWARN spotter, through the Hagerstown SKYWARN subnet, called in a report of Antietam Creek flooding. The information was passed to the main SKYWARN net and then to the NWS.

Many of the operational plans that have been implemented over the past two years got their first test under actual operating conditions.

Activation of the Net

When the NWS activated the SKYWARN net at 7:30 a.m. on December 10, the National Capital ARES pagers were activated as well as telephone and/or pager alerts to contacts in the Hagerstown, Northern Shenandoah, Southern Shenandoah, Charlottesville and Fredricksburg areas. To aid voice and packet communication to and from the Southern Shenandoah region, the N4YET 145.13 repeater in Harrisonburg, VA was linked to the 147.300 repeater and the port on CHONDS (WA4OTF) was opened on 145.730 for packet. Much thanks goes to the operators of these systems which were extremely useful additions to the SKYWARN network.

Net Operation

Remote net control stations worked very well. On December 10, 1992, at one end of the "world," Bob - KA3ZCI in Chesapeake Beach, MD shared many hours of net control duty with Mary Ann - N8ODZ near Paw Paw, WV at the other end of the world. On December 11, Mary Ann had lost power lasting 96 hours and Bob - KA3ZCI took over many hours of net control with relief in the afternoon from Art - KB4ZJ in Fairfax. (Yes, we were really worried when we did not hear from Mary Ann and we understand that a generator is now in place to handle future power problems!)

One of the subnets did not receive the information that the net was being secured. The signal that the net has been secured is the 147.300 repeater is placed in normal mode with a single courtesy beep as opposed to the morse code "WX." If the SKYWARN net control station does not respond, it is important to contact the NWS directly by phone or FAX with severe weather information.

Many reports were FAXED and or phoned into the NWS who truly appreciated the efforts of the amateur radio community. Thanks again to Foundation for Amateur Radio for the funding of the amateur radio station at the forecast office in Sterling!

Packet Operations

This storm provided the first large scale operational use of packet radio in SKYWARN operations. A number of stations, especially W3MMC and WB4PJW in the southern Shenandoah Subnet region, consolidated numerous local reports and sent them by packet. A number of reports were received by KC4OCG-1 from the Waynesboro area. Much thanks to N4SYH for helping to confirm a good connect path.

Public Service Report - Continued

It would be appreciated if users would NOT check into the mailbox to read messages during SKYWARN net operations. This creates "busy signals." Please feel free to monitor traffic as it is up and down loaded. All messages were left to "SB ALL." This should be continued. This storm also gave a new node in central Fairfax a good test. Please try NVARES located near Chantilly, VA on 145.73. Thanks for all of the effort it took to all who prepared and forwarded packet reports. They were useful and appreciated.

A letter of thanks from Jim Belville on behalf of the NWS was included in the December NWS SKYWARN newsletter and is also printed on page 19 in this edition of Auto-Call.

Call Sign Correction

If you get up at 2 a.m. and act as net control until 4 a.m., the least we can do is get your call sign correct! Again thanks to Gary - KD4SRX and Joe - WB4WZZ for losing some sleep during the tornado watch and warning in November.

SKYWARN Network Map

In the next issue of Auto-Call we hope to have a pullout section of the SKYWARN system map showing the main and secondary repeaters, the SKYWARN area of responsibility and the severe weather hotline telephone numbers. We hope you will save this map for future reference. Thanks again to Ross - WA2WDT for his outstanding efforts.

SKYWARN TRAINING SCHEDULE

January 23

SKYWARN Net Control Class 1-3 p.m.

Sterling, VA. Call 703-260-0107 (8 a.m. to 5 p.m.) to preregister

January 23

SKYWARN Basic I 9 a.m.- Noon

Winchester, VA. Sean McClanahan (703) 869-4374 to preregister

January 23

Winter Storm Class 1:30-3:30 p.m.

Winchester, VA. Sean McClanahan (703) 869-4374 to preregister

January 26

SKYWARN Basic I 6-9 p.m.

Cumberland, MD. Charles Johnson (301) 722-1760 to preregister

February 17

SKYWARN Basic I 7-10 p.m.

Baltimore, MD. Call 1-800-426-3378 to preregister

February 22

SKYWARN Basic I 7-10 p.m.

Sterling, VA Call (703) 260-0107 (8 a.m. - 5 p.m.) to preregister

-Submitted by Dan Gropper, KC4OCG, Net Manager, SKYWARN

(Continued)

PUBLIC SERVICE CALENDAR

- Sundays National Capital ARES Council Nets, 9 p.m.
146.91 MHz (if not available, 146.79 MHz)
- Mar. 26-28 Virginia Special Olympics Spring Games, Fairfax County, VA
Contact: Ed Ober - KC4EFJ, (703) 591-0422 or
Bob Lewis - N4SCK, (703) 830-3495 or (703) 830-7325 ans. mach.
- Mar. 27 1993 MS Walkathon - Reston
Contact: Ed Ober - KC4EFJ (703) 591-0422 or
Bob Lewis - N4SCK, (703) 830-3495 or (703) 830-7325 (ans. mach.)
- Mar. 27 1993 MS Walkathon - C & O Canal/Glen Echo Park
Contact: Hank Black - N3ESR, (301) 340-8595
- May 22-23 American Lung Association Clean Air Challenge
(150 mile bike trek Fairfax-Richmond)
Contact: Bob Lewis - N4SCK or Ed Ober - KC4EFJ
-

The U.S. Navy-Marine Corps Military Affiliate Radio System (NAVMARCORMARS)

The mission of MARS is to provide Department of Defense sponsored emergency communications on a local, national, and international basis as an adjunct to normal communications. There is an organized MARS entity within each of the Military Departments. In addition to regular exercises, constant system readiness is maintained through daily networks which handle record message traffic to and from members of the Military and Government all over the world. Traffic is routinely passed over HF SSB, CW and AMTOR, and VHF Packet, all on military frequencies adjacent to the amateur bands. To participate in MARS activities, a person must be a U.S. citizen, at least 14 years of age, and a licensed Amateur.

Each military service has its own unique administrative MARS organization. NAVMARCORMARS is divided into eight world-wide Regions, each Region being divided into Areas. Alabama, Florida, Georgia, Kentucky, Maryland/D.C., Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia, Puerto Rico, Iceland, Antarctica, Europe and all Afloat units operating in the Atlantic Ocean make up Region Two, which is Headquartered in Charleston, South Carolina.

The Maryland/D.C. Area has members located throughout the state, from Oakland in Garrett County to the west, to Port Deposit in Cecil County to the east. Additional participation by amateurs located in Maryland or the District of Columbia would be welcome, and we could REALLY use some members on the Eastern Shore!

Anyone interested in additional information on any aspect of MARS, or to apply for membership in the NAVMARCORMARS Maryland/D.C. Area, contact the Area Assistant for Membership, Mr. Roger L. Gibson (N3ICJ), P.O. Box 156, Hampstead, MD 21074, at (410) 374-4106 (Home) or (410) 374-9051 (Office).



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL WEATHER SERVICE

Washington, DC Forecast Office
44087 Weather Service Road
Sterling, VA 20166

January 5, 1993

Autocall Magazine
P.O. Box 7612
Falls Church, Virginia 22040

Dear Radio Amateur:

I would like to take this opportunity to commend the SKYWARN Amateur Radio Network for an outstanding job during the severe winter storm that struck the Washington Forecast Office's area of responsibility on December 10-12, 1992.

This early season storm was quite complex in that it produced a wide variety of weather over a rather extended period of time. The forecasters continually monitored the Amateur Radio Network, both voice and digital packet, in order to obtain critical ground truth data in real time. This information was used as direct input into the watch/warning process throughout the event. In many instances, the data received from SKYWARN Amateur Radio Spotters was critical in the NWS decision making process. This was especially true during the stream flooding. The initial reports of flooding were from SKYWARN spotters. The warnings were issued based on these reports.

On behalf of the NWS, I thank all the volunteers who spent many hours serving as spotters, repeater and node operators, and in net control stations for their dedicated, professional service during this weather event.

Sincerely,

James D. Belville
Meteorologist In Charge
WSFO Washington, DC



Training Classes

Robert Armstrong, WA4SQL

44 South French Street, Alexandria, VA 22304

Phone (703) 751-2294

General through Extra class upgrade classes. Alexandria, VA. Starting January 25. Sponsored by the Mount Vernon Amateur Radio Club. High speed CW (20 wpm) will be emphasized. Classes will be held on Monday evenings from 7:30 to 9:30 p.m. and will run for about 17 weeks. There is no charge for the class but students will be expected to supply their own ARRL license manuals. The new class is scheduled to be held at the Seminary, but it may possibly be moved to a new location. For details, call John - WZ4A at (703-971-3905).

Novice/Technician Class. Davidson, MD. Starting February 6. Sponsored by the Anne Arundel Radio Club. Classes will be held on Saturday mornings from 9:30 - Noon and run for 11 weeks, using the "Now You're Talking" text. Optional tutorial code practice will be available. Contact Tony Young - WA3YLO (301) 262-1917 or Holly Bevan - N3BMB (410) 923-0229.

General Class Training, Laurel, MD. Starting 15 February. Sponsored by the Laurel Amateur Radio Club. Classes will be held on Mondays at 1900L in the Harrison-Beard building, Laurel, MD. They should run from 8-10 weeks and will not include code. For more information call Pud - W3DQI (301) 498-6293.

General Upgrade Class, Herndon, VA. Starting March 27. Sponsored by Herndon Repeater Group. Classes will be held on Saturday mornings from 9:00 a.m. to 12:30 p.m. and will run for six weeks. Seating is limited to 25 students. To enroll, you must have a Technician Class license. General theory lectures will be provided and code speed will be increased from 5 to 13 wpm. An exam opportunity is scheduled for May 15. Contact Mike - WB8RDN to register.

Novice Training Classes, N.W. Washington, DC. Sponsored by MADRAS. For more information contact Larry Zeichek - N3GKZ (301) 984-6112.

Novice Training Classes, Towson, MD. Sponsored by BRATS. Classes are being held on an on-going basis every Tuesday evening at the Towson Armory. Classes are free; Materials (which you keep) consist of a book and tape and cost \$19.90. For registration or information, contact Joe Chidester - W3SHZ (410) 602-0353

VIRGINIA TRAFFIC TRAINING NET - 3685 kHz 6:30 p.m. daily. 5 - 8 wpm.

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FOUNDATION FOR AMATEUR RADIO
Volunteer Examiner Cooperative

Nancy Draheim - NK4U
3513 Old Post Road, Fairfax, VA 22030
(703) 691-0078

SCHEDULE OF EXAMINATIONS
1993

NOTICE: If you presently have a Technician class license which was acquired prior to March 21 1987, keep a copy of this license available when you decide to upgrade to General class. It will be your responsibility to prove you are grandfathered for Element 3B (General Theory).

- Jan 29** Stafford Area Repeater Assn. (Stafford, VA) (W5YI VEC) Walk-in
Contact: David Boyd, K9MX (703) 659-6241 or Jim McCloud - N4LZJ (703) 786-8012
- Jan 31** Antietam Radio Assn ARC (Hagerstown, MD) (ARRL VEC) Pre-registration requested
Contact: Page Pyne, WA3EOP (301) 714-0688 (Day) or Bob Lay, (301) 714-0688 (Evenings)
- Feb 6** Hampton Roads Radio Assn. (Hampton, VA) (W5YI VEC)
Contact: Bill Runyon, N4BDH (804) 487-8611
- Herndon Repeater Group (Herndon, VA) (ARRL VEC) Walk-in
Contact: Mike Weber, WB8RDN (703) 450-2304
- Feb 7** D.C.M. ARC (Landover MD) (W5YI VEC) Walk-in
Contact Freddie Battle, NG3G (202) 546-9348 (Days) (301) 773-2898 (Evenings)
- Feb 12** Piedmont Technical Center (Culpepper, VA) (ARRL VEC) Pre-registration requested
Contact: Bill Brown, AC4KP (703) 547-3089
- Feb 13** Anne Arundel Radio Club (Davidsonville, MD) (Laurel VEC) Walk-in
Contact: Nancy Alley, NT3Z (410) 761-7115 or Bob Israel, WC3I (301) 262-5083
- Mount Vernon ARC (Alexandria, VA) (Laurel VEC) Walk-in
Contact: Frank Mackey, N4GUS (703) 455-1510
- Mountain ARC (Cumberland, MD) (Mountain VEC) Walk-in
Contact: Leo Patterson, KQ8E (304) 289-3576
- Massanutten ARA (Harrisonburg, VA) (ARRL VEC) Walk-in
Contact: Marshal Cooper, N4ZKH (703) 856-8012 (6-9 p.m.)
- Feb 20** Laurel ARC (Laurel, MD) (Laurel VEC) Pre-registration desirable
Contact: John Creel, WB3GXW (301) 572-5124 after 6 p.m.
- Feb 22** Maryland Mobileers ARC (Glen Burnie, MD) (Laurel VEC) Limited walk-in.
Contact: Jerry Gavin, NU3D (410) 761-1423 or
Ed Calhoun, W3DEQ (410) 647-0370
- Feb 27** Vienna Wireless Society (Vienna, VA) (ARRL VEC) Walk-in
Contact: Ron Natalie, WO2L (703) 620-1727
- Mar 6** South Peninsula ARC (ARRL VEC)
Contact: Ed Brummer, W4RTZ (804) 898-8031

(Continued)

Volunteer Examiner Cooperative - Continued

- Mar 7 D.C.M. ARC (Landover MD) (ARRL VEC) Walk-in
Contact Freddie Battle, NG3G (202) 546-9348 (Days) (301) 773-2898 (Evenings)
- Mar 12 Mount Vernon ARC (Alexandria, VA) (Laurel VEC) Walk-in
Contact: Frank Mackey, N4GUS (703) 455-1510
- Mar 13 Anne Arundel Radio Club (Davidsonville, MD) (Laurel VEC) Walk-in
Contact: Nancy Alley, NT3Z (410) 761-7115 or Bob Israel, WC3I (301) 262-5083
- Mar 20 Laurel ARC (Laurel, MD) (Laurel VEC) Pre-registration desirable
Contact: John Creel, WB3GXW (301) 572-5124 after 6 p.m.
- Mar 26 Stafford Area Repeater Assn. (Stafford, VA) (W5YI VEC) Walk-in
Contact: David Boyd, K9MX (703) 659-6241 or Jim McCloud - N4LZJ (703) 786-8012
- Pentagon Amateur Radio Club (Pentagon Bldg. Room 5B272) (ARRL VEC) Exams 11:45
Pre-registration desired, especially if you require escort inside the Pentagon.
Contact: Mark Wagner - KB2PG (703) 697-5752 (Days) or (703) 239-1255 (7-10 p.m.)
- Mar 31 Maryland Mobileers ARC (Glen Burnie, MD) (Laurel VEC) Limited walk-in.
Contact: Jerry Gavin, NU3D (410) 761-1423 or Ed Calhoun, W3DEQ (410) 647-0370
- Apr 3 Middletown VE Team (Middletown, VA) (ARRL VEC) Limited walk-ins
Contact: Walt Quitter, NC4B (703) 869-5241
- Williamsburg Area ARC (Williamsburg, VA) (ARRL VEC) Walk-in
Contact: Andrew Swanson, WJ4X (804) 253-2811
- Apr 4 D.C.M. ARC (Landover MD) (W5YI VEC) Walk-in
Contact Freddie Battle, NG3G (202) 546-9348 (Days) (301) 773-2898 (Evenings)
- Apr 9 Mount Vernon ARC (Alexandria, VA) (Laurel VEC) Walk-in
Contact: Frank Mackey, N4GUS (703) 455-1510
- Piedmont Technical Center (Culpepper, VA) (ARRL VEC) Pre-registration requested
Contact: Bill Brown, AC4KP (703) 547-3089
- Apr 10 Anne Arundel Radio Club (Davidsonville, MD) (Laurel VEC) Walk-in
Contact: Nancy Alley, NT3Z (410) 761-7115 or Bob Israel, WC3I (301) 262-5083
- Massanutten ARA (Harrisonburg, VA) (ARRL VEC) Walk-in
Contact: Marshal Cooper, N4ZKH (703) 856-8012 (6-9 p.m.)

If you presently have a Technician class license which was acquired prior to March 21 1987, keep a copy of this license available when you decide to upgrade to General class. It will be your responsibility to prove you are grandfathered for Element 3B (General Theory).

NOTE: All examinations require that you submit:
Copy of your current Amateur Radio license (bring original)
Completed FCC Form 610.
Check for appropriate examination fee.
Fees of individual VEC may vary.
FOR ARRL VEC EXAMS, THE COST IS \$5.60
FOR LAUREL VEC EXAMS, ALL TESTS ARE FREE
FOR MOUNTAIN VEC EXAMS, ALL TESTS ARE FREE
FOR W5YI VEC EXAMS, THE COST IS \$5.60

This schedule of examinations appears each month in Auto-Call Magazine
Sponsored by the Foundation for Amateur Radio

DX DX DX

John Kanode, N4MM

JUST WHEN YOU THOUGHT IT WAS SAFE TO TURN ON YOUR RADIO

Around December 20, P5RS7 started appearing on the bands. Before this operation showed up, there have been other P5 calls, all on CW, showing up but no one took it seriously. They were deemed to be pirates or someone with no written authorization to operate in North Korea. However the situation with this group appears to be different. The group consists of Romeo Stepanenko, 3W3RR, UWØMF and a Japanese amateur, maybe JA1HGY. They have been workable on 15, 20 and 40 meters from this area. A press release was received from Moscow in regards to this operation. In the press release it said that "This DXpedition does not want to undermine the major work done by the IARU group consisting of W1RU, OH2BH and others. In our case military (not civilian) license was issued. Moreover, the first operation from a previously CLOSED COUNTRY frequently opens that country for future ham radio activity. After the DXpedition is over, the DXAC shall receive originals of all available documents, licenses, passports, photographs and maybe video footage of the operation. Because of restrictions imposed upon the operators, they can transmit only the correspondents' callsign and his report. Please do not ask any questions on the air. Address all inquires to the QSL Manager, JA1HGY."

This is a new one for DXCC and as far as anyone can tell, there has never been any authorized Amateur Radio from North Korea since WWII. From what info that has surfaced so far, they are using wire antennas and low power, ie, 100 watts. They seem to come on the air around 2200 to 2300Z. It looks like at present they can not operate before this time. No one is really sure how long they will be there. Some reports say December 29, December 31 and February 4. I get the impression that the operation will go on as long as the North Korean Military wants it to. Will it count? At this time that is the \$64,000 question. Until the documentation is received, who knows. As they say in the DXing world, Work first, worry later.

UPCOMING DX CONTEST

Spanish RTTY Contest	February 13-14
ARRL CW DX Contest	February 20-21
CQ WW 160 DX Contest	February 27-28
REF French Contest-phone	February 27-28
RSGB 7MHz Contest-CW	February 27-28

UPCOMING DXPEDITIONS

Kingman Reef	KH5K/NØAFW	Late February
Baker/Howland	KH1/K9AJ	January 26-Feb 3
Montserrat	VP2M/K8SJ	February 5-17
San Andres	HKØ/AA5AU	February 27-
Palmyra Island	KP5	"

TIDBITS

With US, or should I say UN, involvement in Somalia, there have been several stations appearing on the bands using T5/their call. At this time it is not clear if these would count for DXCC credits. Also a T55C has been on the bands. With no Government there, who is issuing calls and licenses? In the past, the UN forces have used 4U/ and these have been accepted for DXCC credit. More on this as it gets sorted out.

Latest on the Czechoslovakia break up. It looks like one country will use OK1, OK2 and the other part will use OM calls. I guess we will know for sure when January 1 comes and goes. I would work all the OK's and OM's I hear to be sure. The DXAC and the ARRL Awards Committee have not acted on this issue yet, so please do not submit any cards from these countries until advised to do so.

(Continued)

DX Report - Continued

A new DX club has been formed in the Northern Shenandoah Valley area. It is called the North Shenandoah DX Association. At present the meetings are being held at the Pizza Hut on US 11 South of Winchester, Virginia. Anyone interested please contact N4MM for more info. The officers for 1993 are:

President:	John Kanode, N4MM
Vice Pres:	George Stein, NJ3H
Sec/Treas:	Frank Conard, N4SLR

The group has applied for ARRL Club Affiliation.

D2ACA QSLs confirmed by RT5UY are being rejected by the DXCC Desk. UT3UY has instructed the ARRL not to accept any cards signed by RT5UY. The card is red, white and blue. The Hungarian bus trip is reported to be in Mexico and will be using the call 4C/HA5BUS. They have been on a world wide trip with a big bus and have activated several countries in Asia. The last report on them was from Australia. They had a big story in a recent copy of THE DXers Magazine.

The Radio Club of America, Inc. Announces Tuition Assistance Financial Aid Grants to Students

The Radio Club of America, Inc. has announced the awarding of \$11,550 in financial assistance grants in 1993 to young students pursuing their electronics college education at under graduate levels. These grants have been awarded in the amounts of \$500 to \$1,050 each. The majority of the recipients are licensed Amateur Radio operators who are pursuing their education in the electronics field at the college level and who have a need to receive financial aid to help in paying for tuition and related text books.

According to Kenneth M. Miller - K6IR, of Rockville, Maryland, this Grants-In-Aid program is the major activity in the Radio Club of America and it has received worldwide acclaim for the role it plays in assisting young students to achieve the successful completion of an academic program. Miller is Chairman of the club's Grants-In-Aid Committee.

The program, which has been in place for over a decade, has been funded through contributions made by many of the club's members who have enjoyed a successful professional career in the electronics industry and who wish to contribute funds to assist the new comers to the industry. The fund now totals over \$100,000, and the interest earned on the investment provides an on-going source of funds for the program. The Grants-in-Aid program includes five \$500 scholarships which are administered for the club by the Foundation For Amateur Radio.

The Radio Club of America is believed to be the "World's First Radio Communication Society." It was founded in 1909 - 84 years ago - and now has a membership of over 1,000 professional electronic industry members world-wide.

Elmer's Corner

Paul Wilkins - AB4CY

WHAT'S IN A WIRE

Wire is defined as a thin circular column of metal, usually flexible. Wire size is specified by the American Wire Gauge (AWG) or the similar Brown and Sharpe Gauge (B&S). The **gauge** is based on the wire diameter and standard gauge numbers run from 0000 to 40 in 44 steps corresponding with the cross-sectional area of the wire perpendicular to its length. For stranded wire, the cross-sectional area is the sum of the areas of the individual strands. AWG 0000 is almost half an inch in diameter and, if copper, a 1.5 foot length weighs one pound. To make a one ohm wire wound resistor you would need to use a 20,400 foot length. At the other end of the scale is AWG 40 which is about three thousandths of an inch in diameter (smaller than human hair). One pound of this wire would be about 33,410 feet long, and a one ohm length would be a little less than one foot.

The National Electrical Code (NEC) sets the allowable **current capacity** of a given wire gauge when used in power transmission applications such as appliances, housing, and industry. The limits are based on resistive heating and are dependent on the type of insulation. Rubber insulated AWG 12 can safely carry 20 Amps - if varnished, 25 Amps, and with polymer plastics, 30 Amps. Above 30 Amps you go to a smaller wire gauge (bigger cross-section). AWG 10 is used for larger household appliances like heating, hot water, and air conditioning.

In consumer electronics AWG 20 is "hook-up" wire and AWG 36 is the hard to see, and nearly impossible to repair, windings on miniature

IF transformers. RF tank coils require smaller gauge wire because of the increased circulating current at resonance. It is possible to melt soldered leads in tank coils if the gauge is too large for the power dissipated in the coil resistance.

There are many kinds of wire used in electrical applications. Copper, both solid and stranded, is the most common because it is plentiful and relatively inexpensive. During WW2, a lot of aluminum wire was used because of copper shortages but it tended to corrode and form hot spots at connections when moisture or salt were present. Besides, aluminum doesn't solder well. Due to the same copper shortage, silver from Fort Knox was milled into wire to wind the large transformers for the Uranium thermal diffusion plant at Oak Ridge, TN. These devices were guarded for a time because of their value until it was decided that a 100 ton transformer wasn't likely to be stolen overnight. Nichrome (an alloy of nickel and chromium) is used to make wire for heating elements because it oxidizes slowly (wears out) at high temperatures. Tungsten wire which is very hard and somewhat brittle is used for filaments in incandescent light bulbs because it can be heated to very high temperatures (in a vacuum) where it emits copious visible radiation.

You will find an understanding of wire **gauge** and **current capacity** very helpful as you get more involved in Amateur Radio. It is important to use wire that is rated high enough for the task it is to perform.

What is Amateur Radio?

Amateur Radio, also known as "ham radio," is communicating. Hams, who must be licensed by their governments, operate two-way equipment from their homes and cars. They communicate with other hams across town or across the world on special sets of radio frequencies, or bands, that are set aside for Amateur Radio use.

Who are hams?

Just about anyone can be a ham—there are no age limits. Many people with disabilities find a door to the world in Amateur Radio. Some famous people are hams, but most are just people from all walks of life who like making new friends around the world.

How can I become a ham?

Getting a ham radio license is easier than you may think. In the US, the Novice (beginner's) license requires only passing a 30-question written exam on basic electronic theory and FCC rules and regulations, along with copying and sending Morse code at five words per minute. The new codeless

Technician class license requires passing two written tests with a total of 55 questions.

The American Radio Relay League (ARRL) offers a wide variety of information for persons interested in radio communication. We can also provide you with a list of clubs and instructors in your area. Many local Amateur Radio clubs offer licensing courses several times a year.



For a prospective ham packet, contact the
ARRL, Dept Q, 225 Main St, Newington, CT 06111, tel 203-666-1541.

1993 Virginia QSO Party

March 20 - 22

From: W.T. "Red" Free-W3FTG, Contest Chairman, Virginia QSO Party
Sterling Park Amateur Radio Club, 3527 Great Laurel Lane, Fairfax,
Virginia 22033-1212. Phone (703) 709-0896

The Virginia QSO Party, sponsored for the 18th year by the Sterling Park Amateur Radio Club, is scheduled for 1800 UTC March 20 through 0200 UTC March 22. Plaques will be awarded to the top scoring Virginia and out-of-state stations, and to the top CW only, Novice/Technician, Club and VA mobile stations. Certificates go to the high scoring single operator in each state, Canadian province, and DX country; to all stations scoring 100 QSOs or more, and to top single/multi and multi/multi operations.

Work fixed stations once per band/mode. No cross-mode or repeater QSOs. Indicate all single operator/multi-transmitter or multi-operator/multi-transmitter operations for consideration as separate categories for certificates only. Work VA mobiles in each county from which they operate. Mobiles parked on county lines count as one QSO and as many county multipliers as they offer. Mobile stations count fixed stations only once as multipliers. Mobiles receive a bonus of 100 additional points overall for each Virginia County in which they log valid QSO. Exchange QSO number and QTH - County for VA stations; state, province or DX country for others.

Frequencies:

160-meters through 2-meters, except no WARC band QSOs permitted.

Suggested frequencies:

CW - 1805 kHz and 50 kHz up from band edge on others.

SSB - 1815, 3860, 7260, 14260, 21360 and 28360 kHz.

Novice/Tech - 10 kHz up from the edge of the Novice CW band edge and 28360 or SSB.

All frequencies plus or minus QRM.

Scoring:

Count one point per SSB QSO, 2 points per CW, and 3 points per QSO with a VA mobile.

VA fixed stations multiply QSO points by total nr. of VA counties, provinces and DX countries.

VA Mobiles add to this the bonus points for Virginia counties in which QSOs were logged.

Others multiply QSO points by the number of Virginia counties worked (maximum of 95) to obtain final score.

Follow standard ARRL contest guidelines. Logs must include name, callsign, mailing address, band/mode, QSO number sent and received, and time of contact in UTC. For club competition (minimum of 3 valid entries), indicate the name of the club. VA mobile stations, indicate mobile operation and log QSOs by county of operation. Novices and Technicians, include a copy of your current license as proof of status. Include a summary sheet and a dupe sheet for 200 or more QSOs.

Mail your entries by April 15 to: Virginia QSO Party
c/o William T. Free-W3FTG
3627 Great Laurel Lane
Fairfax, VA 22033-1212

Recognitions

Nominations are now being sought for the 1993 awards to be presented at the ARRL Atlantic Division Convention in May. **"Amateur of the Year"** nominees should be outstanding all-around Amateurs from the Atlantic Division with a strong record of service to the Amateur community. An award to the **"Grand Ole Ham"** is open to Atlantic Division OMs and YLs who have devoted a lifetime of service to Amateur Radio. Nominees must have been licensed at least 30 years or are at least 50 years of age. A **"Technical Achievement"** award may be presented to an individual or to a group. The awards are commemorated by handsome plaques which will be presented at the Rochester, NY Hamfest banquet on May 22. Complete information on the awards and nomination procedures is available from Richard Goslee - K2VCZ, 24 Elaine Drive, Rocheser, NY 14623. The deadline for nominations is April 1.

Congratulations to Dennis Bodson - W4PWF on his election as Vice Director of the ARRL Roanoke Division. First licensed in 1955, he now holds Extra Class license and has been very active in many phases of Amateur Radio. He received the Roanoke Division ARRL Service Award in 1991, is a Charter Life Member of the ARRL, an ARRL Technical Advisor and member of the ARRL Future Systems Committee. He is also a member of QCWA, 10-10 International, a Fellow of the Radio Club of America, and a Senior Member of the IEEE. He has been very heavily involved with the Emergency Medical Communications Council and the Red Cross. He was, also, just elected as Vice President of the Arlington (Virginia) Amateur Radio Club.

Silent Keys

Paul C. ("Nicki") Buinicki - WB3KIW of Annapolis died of pneumonia on December 10th at Anne Arundel Medical Center. He was 73 years old. He was a person of tremendous vitality and warmth and filled with love of life and of people. A native of Massachusetts, "Nicki" was a Navy veteran, serving from 1939 until he retired as a chief boatswains mate in 1968. During WW-II he was attached to Motor Torpedo Boat Ron 17 on duty in the Philippines and Borneo. He served for a period on the Presidential Yacht the Sequoia. In 1959 he was assigned to the Naval Academy as an instructor in seamanship and navigation. After retiring, he was with the NPPB at the Academy until 1978.

"Nicki" led a full, active life after retirement. A member of Elks Lodge No. 662 in Annapolis since 1968, he served on several lodge committees and is most recognized for his role year after year as a natural Santa Claus at local hospital children's wards, at the Elks holiday parties, at the Naval Station PX, for various church and civic groups and at the Anne Arundel Radio Club's family Christmas parties. To many children he was the "real" Santa. All others were his helpers. Nicki was selected as the 1989 "Elk of the Year" by his lodge.

Nicki became a member of the Anne Arundel Radio Club following the Novice Class of '76. After helping to renovate the clubhouse, he became the club "cook" and served hot dogs and popcorn at club meetings. For several years he planned and prepared communal meals for the annual Field Day exercises. He was a cheerful and encouraging presence at Novice training classes, helped students feel at ease, and offering "Elmer" help with gear and code practice. In January of 1990 the AARC Board of Directors presented Nicki with a life membership in recognition of his significant contributions to the club. He also received a plaque from FAR, naming him the Foundation's "Ham of the Month."

Bill Cooke - K3CN, to whose memory the club's hamshack is dedicated, said of Nicki, "You will be hard put to find anyone who has done more physical work on behalf of Amateur Radio and its public service to the community." All who came in contact with Nicki will miss him very much.

(Submitted by Tony Young - WA3YLO)

Silent Keys

Edward "Doc" Daugherty - W3WN, 84, of Frederick, Virginia died December 20. "Doc" had been an active Amateur since 1927 and was well known as the NCS of the Maryland-Ohio SWOT Net triweekly on 144.170 SSB. He was always friendly and helpful to new check-ins - and regulars as well. He was also an accomplished trumpet player and in the 1930s and '40s had his own band, "The Old Comrades." He also conducted the North End Civic Association Band in the early 1950s. He was very active in a number of civic organizations and particularly in working with youth. During WW-II, he served as a sergeant in the State Guard 7th Battalion Company B of Frederick. From 1927 to 1945 he worked at Harris and Filler Wholesalers, and from 1945 until his retirement in 1973 he was employed at Price Electric Company. He began as a laboratory technician and, at the time of his retirement, was their personnel manager. He will be missed by many.

(Submitted by Michael King - KA3CXG)

Dr. Fred J. Friel - W3FU, 80, radio scientist and noted Amateur Radio operator, died on December 24. Friel lived in Linthicum, Maryland. First licensed in 1928 as 9EKM he later held calls W9ACN, W4KRR, K3CYA and finally W3FU. He also held a number of foreign calls, including XQ8AG, 5N2ACB, and CE3AGI. He specialized in DX and was known throughout the world for his excellent CW. He was a key participant in the Amateur Radio preparations for the 1979 WARC conference and was chairman of the Policy and Definitions Subcommittee of the Advisory Committee for Amateur Radio (ACAR), the FCC's U.S. preparatory group for the ITU's WARC-79 radio treaty conference. He was also instrumental in establishing the C.C.I.R. Working Group on the Amateur Service. He was a member of the Subcommittee that developed the technical justifications for the Amateur need for the new 10, 18 and 24 MHz bands. It was his data and technical report that provided the very important and necessary technical evidence for the WARC-79 to allocate the three new bands to the Amateur service.

Dr. Friel taught electrical engineering at VPI and the University of Virginia. In his Amateur Radio research, he specialized in electromagnetic, antennas, and ionospheric physics. He was a life member of the International Amateur Radio Club (Geneva), the ARRL, CARF, PVRC, QCWA and SOWP, and a Life Senior Member of the IEEE. In 1939-1940, he was a radio engineer with RCA, working with many of the early radio and television pioneer in developing broadcasting and communications receivers and transmitters. He worked for the Navy in 1940-1954 as Chief Engineer of the Underwater Sound Laboratory; Chief Engineer of the Radar Laboratory; and Engineer in Charge of the Underwater Explosions Research Group. He was Director of Instrumentation Engineering for atomic Weapon experiments in the Pacific during 1945-1954.

In the early days of America's space program, he was the Coordinator of Field Operations on Project Vanguard for the Naval Research Laboratory, and later for the NASA when it was created. His most notable professional achievements were negotiating, at the prime minister level, the establishment of United States space tracking stations in Peru, Ecuador, Chile, and Nigeria. For his work in Peru, the President of Peru awarded Dr. Friel the Aeronautical Medal of Merit in 1959.

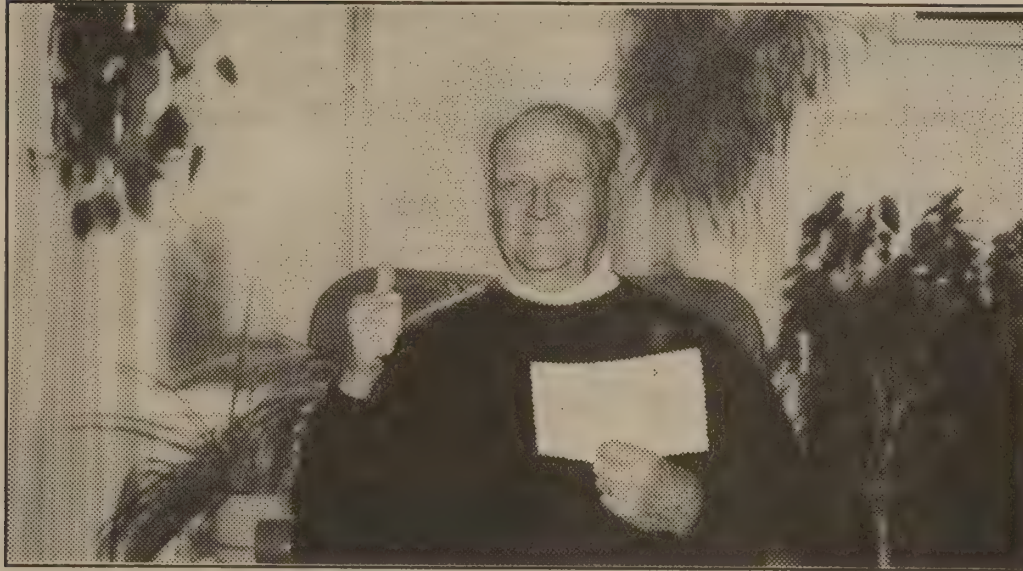
In 1971-1975 he was a Radio Frequency Spectrum Manager with NASA, where he was their representative in the Frequency Assignment Subcommittee and the Technical Subcommittee of the Interdepartment Radio Advisory Committee (IRAC), advising the Executive Office of the President Office of Telecommunications Policy. He was a United States delegate to international conferences of the space research and communications satellite committees of the C.C.I.R., the technical advisory body of the United Nations International Telecommunication Union.

Although no surviving relatives are known, Dr. Friel had many good friends throughout the world that he met through his travels, professional activities, and Amateur Radio.

(Submitted by Jack Kelleher - W4ZC)

Foundation For Amateur Radio
Ham of the Month

Louis Luh - KQ4EY



Thumbs Up - From KQ4EY

On November 21, 1992 a local Amateur achieved his Extra Class license. While this is always a noteworthy accomplishment in any life, certain factors can make it all the more impressive. This new Extra Class operator is none other than Louis Luh - KQ4EY of Arlington, VA.

Louis lost his eyesight about 5 years ago and turned to his earlier interest in Ham Radio. Starting his Amateur career at the early age of 84, he went from Novice to Extra in 20 months. In February of 1991 he obtaining his Novice license (KC4WUX), he got his Technician ticket in May, and the General Class in September; he then progressed to Advanced Class in August '92 and to Extra in November '92.

Louis credits the Handi-hams cassette tapes with helping him study the material. He spent hours each day working toward his goals and accomplishing them one by one. Louis can be heard on several area 2-meter repeaters (Herndon 145.31, Arlington 145.47 and Fairfax 146.79. He is a member of the Herndon Repeater Group, Vienna Wireless Society and a Michigan Ham club where his son, Jerry - KA8QBC, and daughter-in-law, Donna - KA8QBD, live. He keeps a daily 40-meter schedule with them, using his Kenwood TS440S and an all-band GAP HF vertical antenna. On 2-meters he uses a Kenwood TM2550 and a Ringo Ranger-2 antenna. Both rigs have a

digital talker feature which inform him of the current frequency.

Louis was born in Washington, D.C. in 1906, the year of the Great San Francisco Earthquake. (He likes to claim no responsibility for causing it!) His father came to the United States from Germany in 1882 via Ellis Island, with \$5 in his pocket and unable to speak English. Louis became interested in radio when he was 16 but could not pursue it due to family circumstances. Sixty-eight years later, he finally became a Ham.

Louis is retired from the Travel Industry where he published travel, tour and guidebooks. He was a talented, worldwide photographer and accumulated an extensive collection of photos. He is also an expert wood craftsman, making many of the beautiful and remarkable pieces of furniture around his house.

Asked what advice he would offer others who are physically challenged, he said you "should just make up your mind, no matter what your capability is, and do it - obtain your goal." Louis can count many friends in Amateur Radio and should be proud of his many accomplishments. I am proud to be one of his friends, and I thought others would like to know the story behind the callsign "King Queen 4 Egg Yolks." Louis is truly a remarkable man.

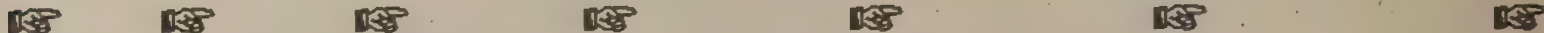
Michael Weber - WB8RDN

T-MARC Repeater Maps

The Repeater Maps appearing on the following pages are drawn from the data in T-MARC files. If any repeater is shown in the wrong location or at the wrong frequency, please ask the repeater's trustee or sponsor to up-date his T-MARC records.

Uncoordinated repeaters, as well as those that have asked not be listed in the Repeater Directory, have not been shown on these maps.

Questions or comments may be sent to WA2WDT @ W3INK, or call Ross Merlin (301) 983-2842.



Marine Corps Marathon

Sixty-five Amateur Radio operators provided communications support for the seventeenth annual Marine Corps Marathon. Photos below show some of the activities. Emergency medical communications and television coverage was provided for the event. This is one of Amateur Radio's largest public service activities in the Capital Area. (See the Public Service Column in the January issue of Auto-Call.)

Photos by T.J. O'Brien - AC4HW.



The Team at Medical Packet Station



Judy - KC4WES

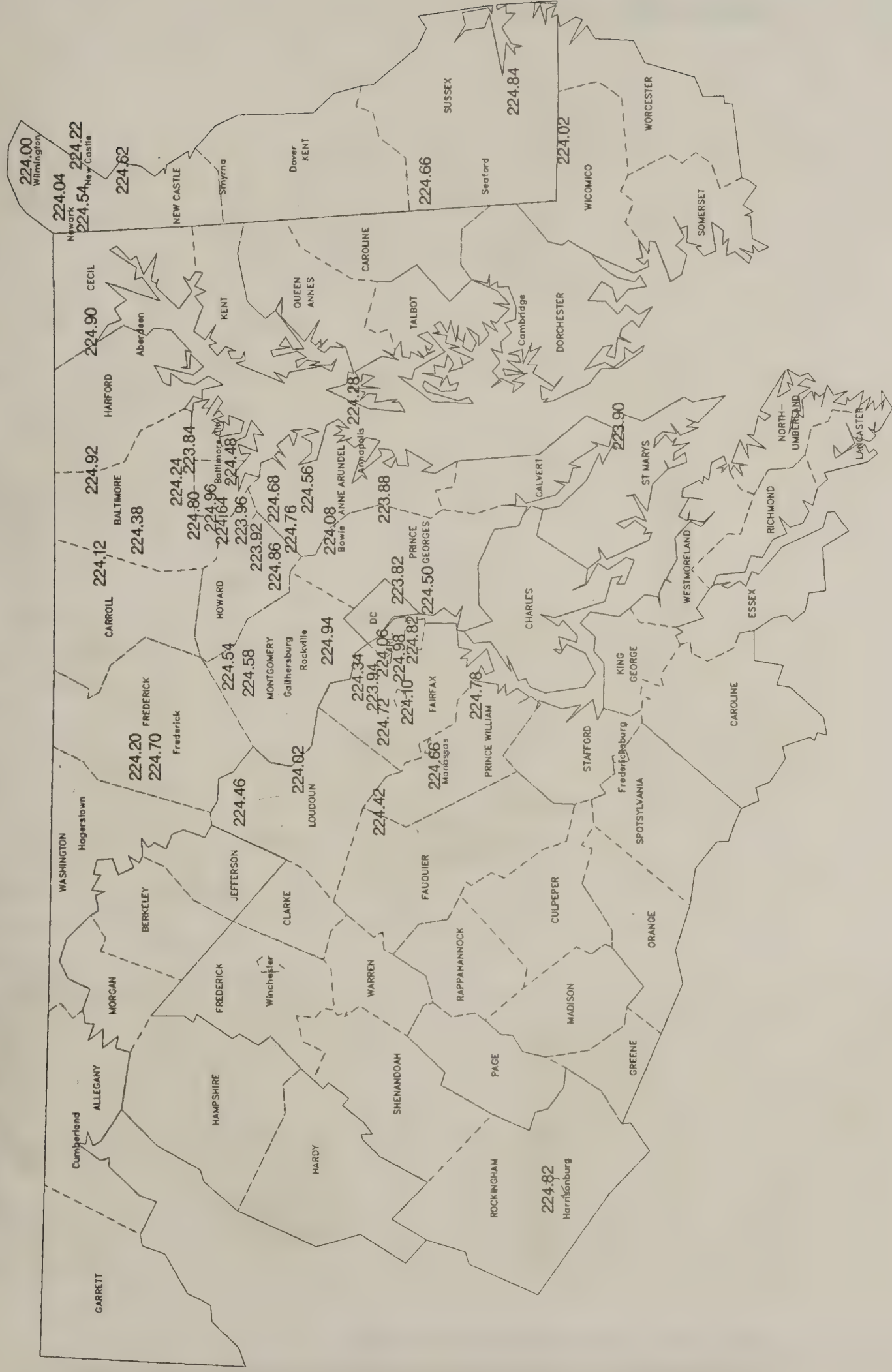
Ed - KC4EFJ



Joe - WB4WZZ Chuck - N4HCB

222 - 225 MHz Repeaters

T - MARC Coordination Area

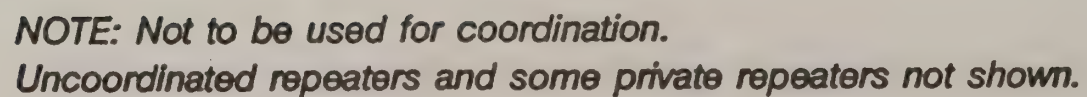


NOTE: Not to be used for coordination.
Uncoordinated repeaters and some private repeaters not shown.

224.60 MHz is the Builder's Channel

T-MARC C

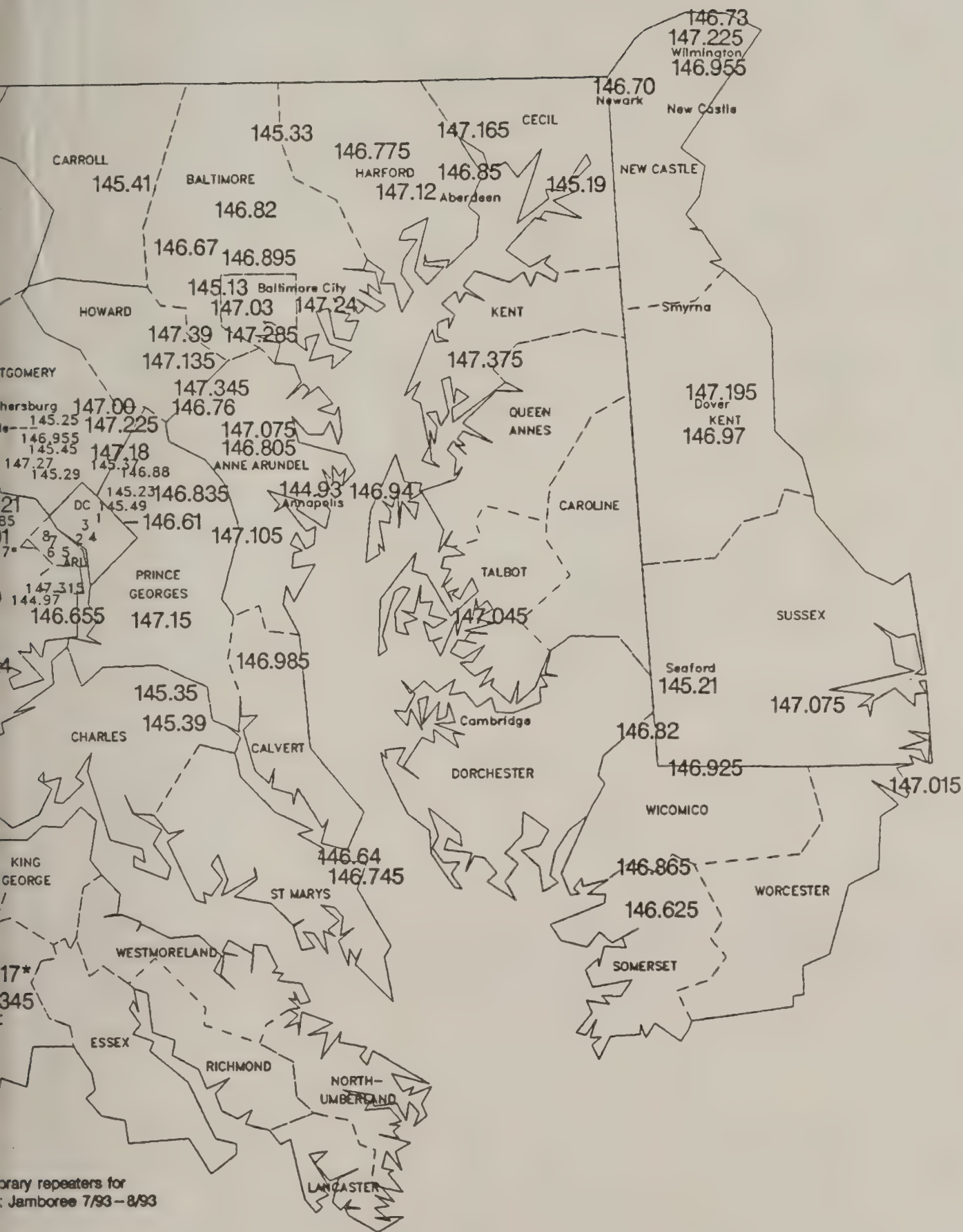
T-MARC C



z Repeaters

ordination Area

© 1992 WA2WDT

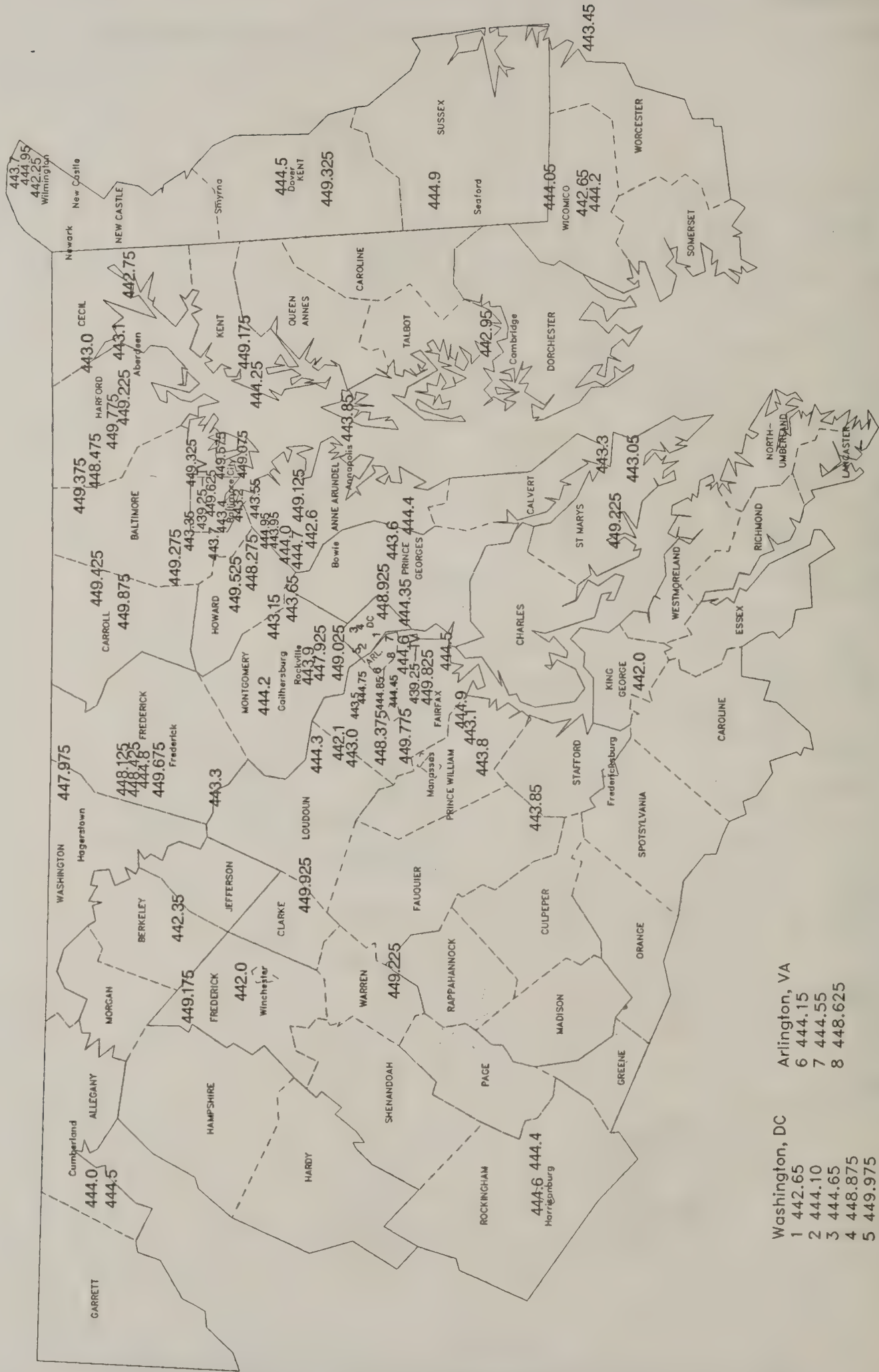


orary repeaters for
Jamboree 7/93-8/93

* Temporary operation on Builder's Channel

442 - 450 MHz Repeaters

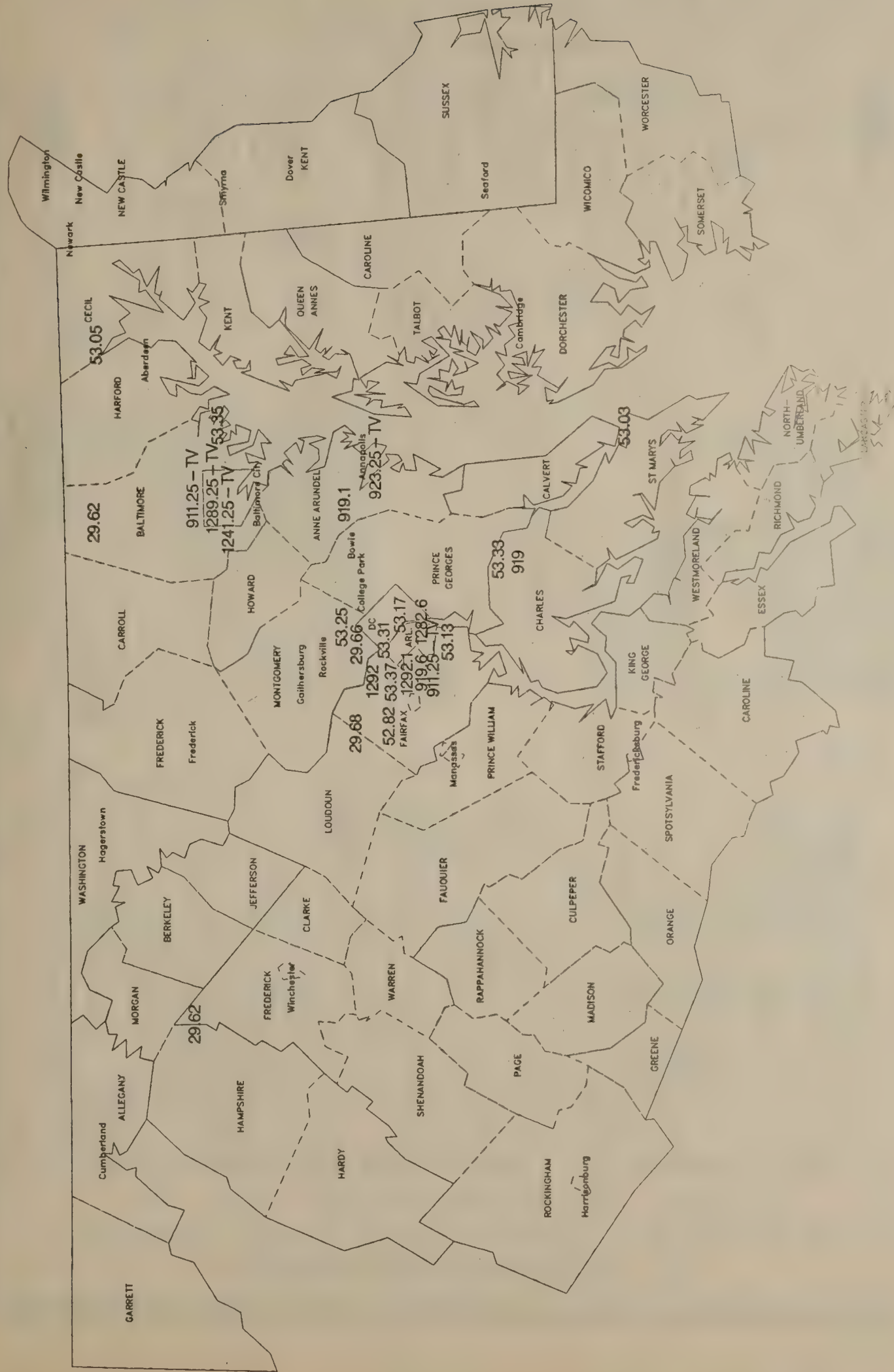
T-MARC Coordination Area



NOTE: Not to be used for coordination.
Uncoordinated repeaters and some private repeaters not shown.

442.9 and 447.875 are the Repeater Builder's Channels

29, 52, 902, and 1240 MHz Repeaters



NOTE: Not to be used for coordination.
Uncoordinated repeaters and some private repeaters not shown.

920 and 1283 are the Repeater Builder's Channels



ANNOUNCING THE VIENNA WIRELESS SOCIETY WINTERFEST™ 1993



SHUTTLE BUS

RAIN SNOW OR SHINE
SUNDAY, FEBRUARY 28th

7:30 AM

AT THE

VIENNA COMMUNITY CENTER

120 Cherry Street

Vienna, VA

SNACKS—DRINKS
FOOD SERVICE

GENERAL ADMISSION

\$5.00 PER TICKET

XYL, UNDER 12 FREE

ALL YOUTH IN UNIFORM ADMITTED FREE

VEC EXAM 9 AM

SATURDAY

FROSTBITE
TAILGATING

\$10 PER SPACE • OPEN 6 AM
FIRST COME • FIRST SERVED

SHUTTLE BUS FROM
VIENNA METRO KISS & RIDE

7:30 AM–2:30 PM

TALK IN K4HTA/R

146.085in 146.685out

146.190in 146.790out

ORIGINAL DXCC
FIELD CHECKING



USUAL AMENITIES

DRAWINGS EVERY HOUR 9–3

FOR INFO . . . NANCY DRAHEIM NK4U (703) 691-0078

FOR TABLES CALL . . . HARRY KAKLIKIAN W4ACN (703) 978-4402

AN ARRL SANCTIONED HAMFEST

Metrovision Amateur TV Club

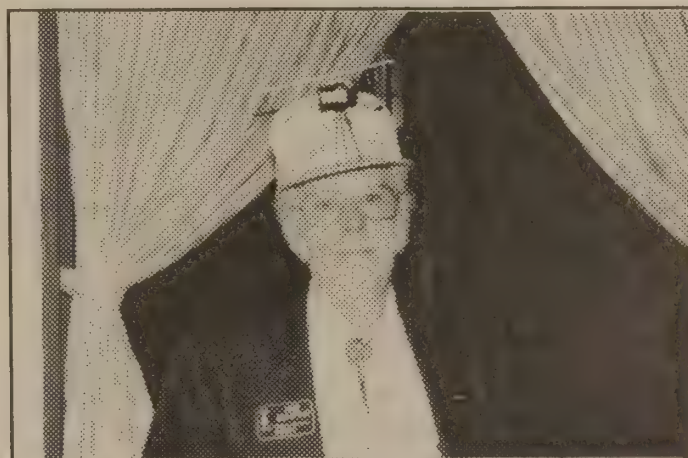
FAST SCAN - COLOR - ATV

Meetings: Quarterly: Call for next meeting time and place.
Repeater: WA9GVK/4 (Video and Audio) 425-431 MHz in; 438-444 MHz out
Also accessible on 144.970, simplex, audio.
On-the-air: Sundays at 8:00 p.m.
Mailing: Metrovision, Inc., P.O. Box 8231, Falls Church, VA 22041
Information: Sam - N3GHHY (301) 630-3373
Dick - WB3EPX (301) 439-8135

Don't forget the Metrovision meeting for March 4 at 7:30 p.m. here at my QTH in Adelphi, Maryland. Flyers will be sent out, giving you directions. Light refreshments will be served at the meeting. Please plan to attend as we need your support.



Bruce - WA9GVK and Rhonda



Sam - N3GHHY & Hat



Metrovision Dinner/Meeting

The above photos were taken at our annual Metrovision dinner/meeting which was held back in October. We will provide some more photos next time.

See you on ATV

Dick - WB3EPX

M A D R A S

The Maryland Apple Dumpling Radio Amateur Society Inc.

Meetings: 2nd and 4th Thursdays - 7:00 p.m. NBC Building, 4001 Nebraska Avenue, N.W.
First Saturday - 10:00 a.m. Informal meeting at the clubhouse.
Repeater: 444.100/449.100 MHz 145.45/144.85 MHz
Packet: 145.55 MHz Node 44.96.0.85
BBS: (301) 258-1954
Mailing: P.O. Box 2468, Wheaton, MD 20902
Information: Scott Standiford, W3YTW (301) 589-9321 or BBS
Larry Zeichek, N3GKZ (301) 984-6112

Schedule of Events

- February 11 - The first regular monthly meeting will be held at 7:00 p.m. in the WKYS-FM conference room at NBC, 4001 Nebraska Avenue, NW. The presentation, "An Introduction to AMTOR" will be by Louis Soloman - N3EXW.
- February 25 - The second meeting of the new year will be at the same location and at the same time. We have a tentative program lined up on one aspect of international short wave broadcasting.

By the time this is published, the MADRAS Inaugural Special Event Station, W3USS, will have performed its 3-days of operation over the January 16th. For certificate, send SASE to Box 2468, Wheaton, MD 20902.

Thanks to George Stephens - WB3DAC who, along with Senator Charles S. Robb of Virginia, made the operation possible. Thanks also to the following operators who kept us on the air:

Hani Raad - N3IWM
Matt Lawrence - KB5BGU
Ed Karch - KC4FYA
Wonki Oh - WM2X
Larry Ziecheck - N3GKZ
Ernst Gerhels - NQ3X

Philip Kim - KA3YNE
Ken Firestone - N3JBU
John Holoway - WF3Q
Charles Hynson - KD3IM
Nancy Loomis - KA3TVK
Laquetta Karch - KK4WQ

Jean Blacik
Louis Solomon - N3EXW
Michele Cimbala - WK3X
Jon Albers - KA3OV
Terrace Hines
William Free - W3FTG

Scott Standiford - W3YTW

Foundation Meetings

The Foundation for Amateur Radio, Inc. meets at 8:00 p.m. on the second Wednesday of each month.

Visitors are always welcome

Phone (301) 725-5822 for information

The next meeting will be on February 10 in Takoma Park, Maryland
Columbia Union College Science Building Auditorium, Flower Avenue
(Take beltway exit 30 South on Colesville Road
to Franklin Avenue, East on Franklin to Flower, South to the college)
Talk-in on 147.18

AMSAT

Radio Amateur Satellite Corporation

Meetings: Semi-annual - January and July.
Local Net: Sunday at 9:00 p.m. on 146.835 MHz FM, W3ZM/R, Greenbelt, MD
Information: Pat Kilroy - WD8LAQ 301-249-3396 or on packet WD8LAQ @ WB3V.MD

What makes a successful meeting?

At my work place I have a little sign that bears the title, "The Characteristics of a Good Meeting." The sign contains a check list of seven items that seem to apply to every type of meeting regardless of whether it relates to one's profession or hobby. Each item listed is as follows.

- The meeting has a specific purpose or objective.
- The leader has a prepared agenda.
- It starts on time and has a specific duration time.
- All attendees arrive on time and well prepared.
- The leader has control at all times and doesn't wander from agenda items.
- The outcome of the meeting is clear.
- A meeting summary is distributed promptly, in writing through the leader, and includes agenda items discussed and decisions reached, responsibilities and due dates for any action items, and a follow-up or implementation plan.

Amateur radio satellite enthusiasts of the Greater Washington, D.C. area were to meet last month to "show and tell" of their particular interests, as well as to feed the space communication appetites of new comers. With great interest I watch how well our new local "grass roots" AMSAT group flies. Certainly, I aim to see that these semiannual meetings, however informal, provide some lift. Perhaps others can benefit from my little sign as well.

Congratulations to Jesse Buckwalter-NZ3F of Annapolis and to Allan Fox-N5LKJ of St. Michaels, MD who were recent guest "speakers" on the D-MARC packet radio net! On one net, Jesse (packet radio address NZ3F @ W3ZH.MD) described what a PACSAT is and what services and opportunities are available to us on the packet satellites.

A week later, Allan (N5LKJ @ N5LKJ.MD) proposed a relatively low-cost path on how the average ham can equip his station to work a given pacsat. D-MARC member Maureen Mulrooney-N3JNE (N3JNE @ KA3RFE.MD) coordinates the packet radio net which is held each Wednesday evening. Be sure to check in to one of Maureen's nets soon!

Again, here is a reminder to all you satellite "Hungry Hams" to advise me of your proposed diner location and time. Last month I described some things we must consider in choosing such a place to meet occasionally for lunch. Keep those cards and letters coming, folks!

Are you looking for a presentation at your next club meeting? Then try "Amateur Radio: Gateways to the 21st Century" by Joe Kasser-G3ZCZ.

"Gateways" is a half-hour documentary that I produced last year on my trusty home camcorder. Joe and I donated our time and talents to create a thought provoking statement on what Amateur Radio may look like in a few years, as well as to provide a potential fund raiser for our mutual ham radio club. In it, Joe assesses the current state of our ham band use, sees exciting new opportunities and goals for us ham radio operators in the near future, and then proposes a clear plan to attain the goals.

The presentation is available on VHS tape format from either the American Radio Relay League in Newington, CT or locally from the NASA Goddard Amateur Radio Club. The ARRL Educational Activities Department (203-666-1541) will provide any affiliated club or individual with a free loaner tape. Those who would like a personal copy of "first generation" quality at a nominal donation should contact Vikki-KA3PVS (301-249-2609) of the Goddard club.

Pat Kilroy - WD8LAQ

Northern Virginia FM Association, Inc.

Meetings:	3 times per year (fall, spring, winter)
Weekly Nets:	NVFMA Net: Every Wed., 8:00 PM local, 146.79 ARES/Public Service Net, Every Sun., 9:00 p.m. local, 146.91 On Air Equipment Clinic, First Wed. 7:30 p.m. local, 146.79
Repeaters:	2-Meter: 146.79- (W4LBL-FFX City) & 146.91- (W4XG-Tysons Corner) 440 Mhz: 444.75+ (K4JYF-Tysons Corner) 220 Mhz: 224.50- (WB4YHD-FFX City & X-linked to 146.79) 224.34- (KB4CVL-Tysons Corner) 1292.1 MHz out / 1272.1 MHz in (K6LEW-Tysons Corner)
Membership Info:	Norm Rosenthal - KB4VLP, (703) 425-7108 or Margaret Lindsley - KB4IKU, (703) 818-8182
Mailing Address:	NVFMA, P.O. BOX 486, McLean VA 22101

On December 24, 1992 from 7-9 p.m., Santa Bob Loder - WA4OGH rode the airwaves again for children of all ages on the W4LBL 146.79-Fairfax repeater! Many children checked in with Santa via two meters from all over the Northern Virginia area. Continuing a many-year tradition, Dr. Enrico Davoli - WB4GKN, and his family of "elves," went around the pediatrics floor of the new Women's and Children's Center of Fairfax Hospital and visited each child who had to spend Christmas eve in the hospital. Many of the children spoke to Santa Bob via Amateur Radio, with Dr. Davoli's assistance from a mobile radio on a cart wheeled from room to room. Gifts donated by area merchants as well as gifts donated (some handmade) by the parents of children Dr. Davoli and Santa Bob visited in previous years were very appreciated by the children.

The hospital makes every effort to release every child in time for Christmas eve, so Santa's visit was especially important to those children

who were too ill to be released. The families of a number of the children also expressed their thanks to Santa and the Amateur community for making a difficult time a little easier.

Much thanks go to Bob and Enrico for helping to bring some special holiday cheer to these children and their families every year. We eagerly await Santa's arrival next year with the hope that there are no children in the hospital then!

Congratulations to Nancy - NK4U, Ed - KC4EFJ and Tom - N4BV for providing information to The Washington Post concerning Amateur Radio. A super article appeared on page 51 in the Weekend section of The Post on December 25. It is nice to get good publicity for Amateur Radio as the challenges to our small portion of the electromagnetic spectrum are ever increasing.

Dan - KC4OCG

Beware of the Eavesdroppers

Last summer I discussed over a local repeater my plans for a trip to Florida with my family. When we returned, our home had been burglarized. VCR, tape deck, coins, silverware, etc., were gone, and of course my ham equipment was missing. I did have my SSN and callsign on most of the rigs.

Two weeks later the police recovered a stolen car in the next state. The trunk of the car was filled with stolen property. On the front seat was a scanner programed full of local repeaters and a 1992 call book with over 100 calls checked in a three state area. Beware of the eavesdroppers. **Do not give out personal information over the air waves.**

Too embarrassed to sign.

Arlington Amateur Radio Club

Meetings: Third Tuesday of each month at 7:30 p.m.
Arlington Red Cross Chapter House, 4333 Arlington Blvd. (Rte. 50)
Net: Tuesdays (except meeting nights) at 7:30 p.m. on 144.87/145.47 MHz FM
Info: Mike Callaham - NW3V (703) 241-5618

The February Meeting

The program for the February 16th meeting of the Arlington ARC will be a demonstration of a homebrew HF to 70 cm transverter by Jim - KM4XG. The transverter was inspired by plans in QST for August and September, 1991 but differs greatly from the original design. With it's help, Jim will use his FT-757GXII HF rig (which is capable of FM) to communicate with a handheld on the 70 cm band. He could also use it for 70 cm SSB, if anyone's out there!

The December Meeting

The meeting was called to order at 1938L by President Bob - KI4MB. Present were several types of refreshments: brownies, oatmeal-raisin cookies, chocolate-chip cookies, nuts, coffee, various sodas, and uncounted other goodies. Thanks to Dennis - W4PWF and those he enlisted to help.

Secretary Mike - NW3V read the minutes of the November meeting from the December newsletter, and they were approved; after which Treasurer Tom - W4LMW read his report on the club's finances.

New Business: Jim - AB4YP noted some news about contesting in the newsletter of the Arlington Chapter of the 10-10 International Net. He also alleged that some [ex-]CBers who had gotten Technician licenses and migrated to the 2-meter band were engaging in various illegal practices including monitoring 2-meters for loose talk about going on vacation (etc.) and then looting unoccupied QTHs found by such eavesdropping. He urged members not to make such unguarded statements on the air, especially on 2-meters.

Bob - KI4MB called for the elections to be held, and Dennis - W4PWF summarized the nominations made at the previous meeting:

President: AB4YP, Vice Pres: W4PWF,
Secretary: NW3V, Treasurer: W4LMW.

Bob - KI4MB noted that Jim - KM4XG, who left just before the meeting began, had left him a

written message nominating and voting for Mike - NW3V for president and Craig - N4EFJ for secretary, and voting for all unopposed candidates. After some discussion about absentee ballots, the nominations were accepted.

Bob - KI4MB asked the candidates if they would like to make a campaign speech. Jim - AB4YP promised that, if elected, he would try to increase membership and would call [all] members to urge them to attend. He said he would also like to see the club station used more for recreational purposes and pledged that he would open the club station on weekends.

Mike - NW3V said that he thought the main purpose of the club should continue to be emergency and other public service to Arlington County and particularly to the club's sponsor, the Arlington Chapter of the American Red Cross. He said that, if elected president, he would maintain a close working relationship with the Acting ARES Emergency Coordinator for Arlington County, Chuck Rexroad - N4HCP. He noted that several proposals for increasing membership had been considered and rejected in recent months, but he considered the issue an open one and would continue to consult with the membership on it.

Bob - KI4MB called for a vote with the following results:

President:	Mike Callaham - NW3V
Vice Pres:	Chuck Bodson - W4PWF
Secretary:	Craig Church - N4EFJ
Treasurer:	Tom Crabe - W4LMW

Mike - NW3V noted that Jim - AB4YP had been trying to set up a program for the December meeting but was advised to defer it because of the elections and the party. The meeting then adjourned for the gift exchange mentioned in last month's Beacon. Someone got a 4-element 2-meter Yagi! There was a surprise for everyone, and most refreshments went home in doggie bags.

Craig Church - N4EFJ

AMRAD

Amateur Radio Research and Development Corp

Meetings: Second Thursday of each month, Fairfax County Library, McLean, Virginia
Repeater: WD4IWG 147.81 MHz in, 147.21 MHz out. Director, Jeff Brennan - WB4WLW
WD4IWG is an open repeater for FM voice and digital communications, especially for experimental modes. Autopatch available to members.
Data Address: Our internet address is lkestel@csugrad.cs.vt.edu.
AMRAD CBBS: (703) 734-1387 Operated by Lawrence Kesteloot - N4NTL
E-Mail address is lkestel@csugrad.cs.vt.edu
Information: Andre Kesteloot - N4ICK (703) 356-5519 or Terry Fox - WB4JFI (703) 698-7612

AMRAD is a worldwide club of several hundred Amateur Radio and computer experimenters. Its purpose is to develop skills and knowledge in radio and electronic technology; advocate design of experimental equipment and techniques; promote basic and applied research; organize technical forums and symposiums, collect and disseminate technical information; and provide experimental repeaters. We are looking for people interested in any of the technical aspects of Amateur Radio.

The annual business meeting and elections for Board of Directors were held on 10 December. This was followed by a presentation on Spectrum Management Planning by Sparky Terry - KD4KL and Richard Barth - W3HWN, both of the Department of Commerce. The January meeting featured a talk on PACTOR by Larry Walker - K4LLQ. Sandy - WB5MMB and Dave - N4JGQ gave a talk and demonstration on 10-GHz activity at the November meeting of the Arlington Radio Club.

Current and Up-Coming Activities:

AMRAD members are evaluating some donated digital radio equipment for a network in the

900-MHz band. Interest continues in DSP, spread spectrum, and microwave activity. The cold weather drives the experimenter to his/her workbench! However, several members will brave the weather over the next few weeks to mountain-top with 10-GHz equipment to try various paths.

We continue to meet Saturdays at 1200 hours, at Taco Rio Grande in Vienna; our monthly meetings (technical talks) are the 2nd Thursday of the month, at the McLean Dolly Madison Library. Everyone is welcome! Talk-in on the AMRAD repeater.

Dave - N4JGQ

Quarter Century Wireless Association

Local Chapters

Washington DC Chapter #23 and Vic Clark Chapter #91 of the QCWA, along with Chapter X of the Society of Wireless Pioneers hosted an annual holiday joint luncheon at the Ramada Hotel in Falls Church, Virginia on December 12. This social event was conducted with a minimum of business and with emphasis on the holiday congeniality of friends with mutual interests.

We were favored at this holiday get-together by the attendance of Bill Cross - WA3JLP of the FCC and by John Kanode - N4MM, Director

of the Roanoke Division of the ARRL. The affair was culminated by "Santa Claus" - W4NH dispensing the gifts as door prizes.

This year I wish to emphasize the exhausting effort and time devoted by both Em Mehring - W4NH and Jack Kelleher - W4ZC to make this holiday luncheon such an enjoyable and complete success for all of us.

73 and the Best for '93 to All.

Stan Brigham - W3TFA
Sec'y/Treas Chapter #23

Vienna Wireless Society

25 Years of Public Service

Meetings: 2nd and 4th Fridays of each month, 7:30 PM
Vienna Community Center, 120 Cherry Street, Vienna, VA

Repeaters: K4HTA/R 146.085 in/146.685 out, 222.340 in/223.940 out,
448.250 in/443.250 out, 443.375 in/448.375 out

Nets: Vienna Emergency Net every Thursday at 7:30 p.m. 146.085 / 146.685.
Pow Wow Net every night except meetings at 9:00 PM on 28.444
Slow Speed Code every night except meetings at 8:30 p.m. 28.390 MHz

Information: Margy Patterson - N2JRG (703) 620-1727

Training Classes: Paul Wilkins - AB4CY (703) 560-2779

Mailing Address: P.O. Box 418, Vienna, VA 22183

December 1992 and January 1993 — busy months for Vienna Wireless Society, with elections of new Directors, the passing of a new club budget, and the installation of new officers! All of us wish to thank our 1992 officers and directors for their hard work and expertise over the last year. Thanks go to Margy Paterson - N2JRG, Bob Lipp - K4MJO, Ross Patterson - N4YYH, Dave Rogers - N4JGQ, Ron Natalie - WO2L, "Mac" McClain - KC4IGS, Barry Bennecoff - KD4BK, and Jim Parsons - WA4LTO. Special thanks go to Margy for leading our club as President in 1992. Your advice and counsel will be helpful in the months ahead.

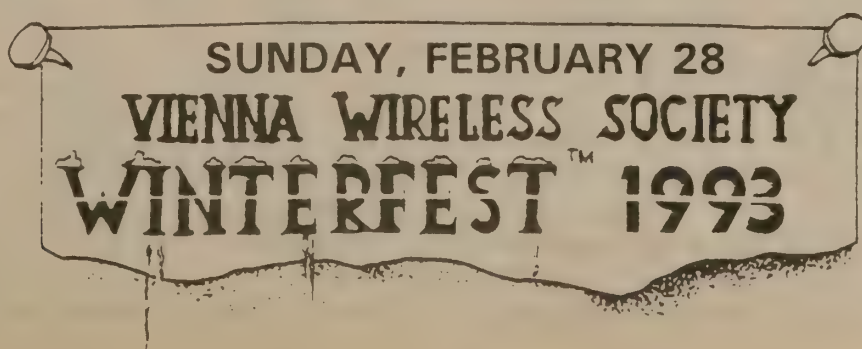
VWS is now in its 30th year as a radio club, and we have been fortunate to have had some very fine individuals as founders and leaders of our club over the years. A sizable number of our early officers, including Ray Johnson - K5RJ (ex-K4DXO), our first President in 1963, are still playing an active role in our club and the community. Others have moved elsewhere and continue to serve their communities and clubs through Amateur Radio. On this 30th anniversary we congratulate all members of the Vienna Wireless Society, and particularly all those who were with us in the early year. Your contributions will not be forgotten, and your guidance will continue to be a necessary element for planning the years ahead.

WINTERFEST™ is upon us! Keep your eye out for the ground hog, as we should have the usual good weather in late February for the area's original winter hamfest. Please see our ad in this issue on page 30 for details. WINTERFEST™ is very much a fun event for VWS members, offering us a chance to meet again with old friends from other regions and an opportunity to make new contacts and to eye (and buy) some of our favorite equipment, both new and used. We also get to savor the delicacies from the kitchen of the Vienna Community Center. If you are new to the hobby, this event is a MUST for your calendar. Join us and bring your friends! There will be several hundred attendees and lots of excitement on Sunday, February 28th. Get there early!

OLD EQUIPMENT DONATIONS FOR WINTERFEST™ are welcome and will be sold at our VWS club table. All proceeds from sales of this donated equipment will go to VWS to help defer the rising costs of holding this event. Bring what equipment you have to donate the morning of WINTERFEST™ - including manuals and a suggested price. Old radio magazines should be bundled, by year. JUNK BOXES ALSO WELCOME.

See you all there!

Mark Murray - WX3H



Green Mountain Repeater Association, Inc.

Meetings: Board of Directors / Control Operators, Last Monday each month.
 Luncheon: First Saturday each month, 11:30 a.m. at Fountain Cafe,
 Laurel Shopping Center Mall, U.S. Rt 1 (Baltimore Avenue) and Cherry Lane.
 Repeaters: KD3VR - 146.61 (Cheverly) and K3GXF - 146.88 (Greenbelt)
 Mailing: GMRA, P.O. Box 429, Riverdale, Maryland 20737
 Information: Boyd Nelson - KZ3Z (301) 434-0934

The Green Mountain Repeater Association would like to thank its members, once again, for the generosity they have shown in their contributions. Due to this generosity, GMRA will finish the year in sound, stable financial condition. The Board of Directors is also happy to announce, at long last, they will be able to retire the debt incurred to replace the controllers on both repeaters.

The dues have not increased in five years, and the Directors are happy to announce that they will not increase this year. Any surplus funds at the end of the year will be placed in a "sinking fund" earmarked for future equipment. If present budgetary predictions continue, possibly in five years enough funds will be accrued to replace one of the repeaters.

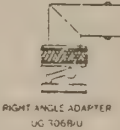
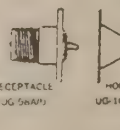

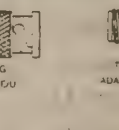
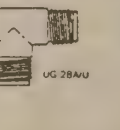


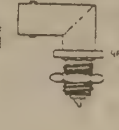
Both repeaters are over 25 years old, and if a new repeater can be purchased in the future, it will replace one of the existing ones and be kept as a backup for the other ancient repeater.



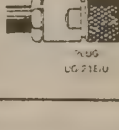

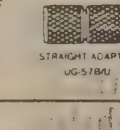
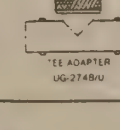

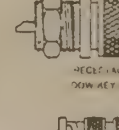
The new GMRA operating handbooks will be out in February. According to Joe Nunemaker-KD3VR, a vast amount of time has gone into the preparation of the new handbook. There are numerous changes in the By-laws and procedures used by GMRA for the use of the repeater systems. Complete information on how to use the autopatch and other functions, including proper procedures for the use of the 911 system, will also be included. GMRA would like to extend best wishes to all for a Happy and Healthy 1993. Hope you made your resolutions early.

Ken Easton - N3HLY

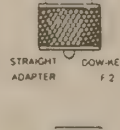

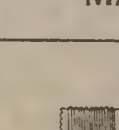
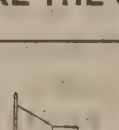
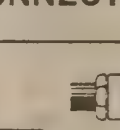
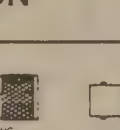
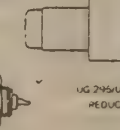
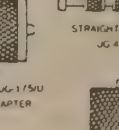
The R.F. Connection


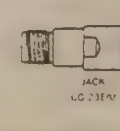
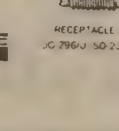
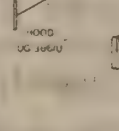
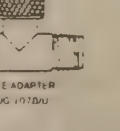

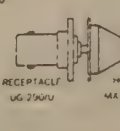
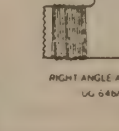
"SPECIALISTS IN RF CONNECTORS AND COAX"

MAKE THE CONNECTION

The R.F. Connection
 213 N. Frederick Ave., Suite 11, Gaithersburg, MD. 20877
 301-840-5477

"Ole Virginia Hams" Amateur Radio Club

Meetings: Third Monday of each month, 8:00 p.m.
Northern Virginia Coop Building
10323 Lomond Drive, Manassas, Virginia

Repeaters: Voice: WA4FPM 146.97 and 224.66
Packet Node: 145.030 and 223.540 (OVH)
Packet BBS: 145.030 (BBSHRG)

Net: Each Thursday, 8:00 p.m., 146.97 and 224.66

Information: Harry Vorhauer - W4PVA 703-368-6050
Steve Frick - N4OGR 703-361-0008

Mail Address: Ole Virginia Hams ARC, PO Box 1255, Manassas, VA 22110

1993 IS A GAS: Or lack thereof...

On Saturday, January 2 and Sunday, January 3 several thousand homes in the Sudley road area of Prince William county experienced a Natural Gas outage. The outage occurred when a Gas main broke due to the work of a backhoe operator. As a result, many valves had to be switched and the lines purged. Eventually Gas company employees had to enter each home to light the pilot lights. The affected homes were without heat or hot water until late Sunday. What does this all have to do with Amateur Radio and Ole Va. Hams? As a result of the outage and the cold weather, the Red Cross issued an alert and activated its emergency disaster procedures which included notification of Amateur operator members of the disaster team. At the Ole Va. Hams this means our Emergency coordinator, Harry - W4PVA.

The Red Cross activated a temporary shelter at the Sinclair school in the Sudley area and Harry - W4PVA responded by placing a general announcement and request for Amateur volunteers on the OVH 2-meter/220Mhz repeaters. Several OVH hams responded and agreed to be available if needed. Harry spent time at the shelter command post but fortunately no area residents needed to utilize the shelter. Even though in the end the shelter was unused, the activation of it was very real. Once again the Ole Va. Hams and the Amateur community demonstrated its willingness to assist authorities where needed when called upon.

Reminder - in future Manassas area emergencies if Amateur help is needed a general call will be placed on the OVH repeaters (assuming they are operational) by the emergency coordinator.

WELCOME NEW MEMBER: Welcome and congratulations to new OVH member Jarred-KD4UMC. Check this out - Jarred went to Cape St. Clair, Maryland on September 29 and passed the theory tests for Novice thru General. He next attended the Manassas testing session on November 14 and passed the Advanced class test. He then went to the Culpeper testing session on December 11 and passed the General (13wpm) code test! All this BEFORE even receiving his call sign! Perhaps Jarred could teach us a few study skills!

PACKET NOTE: At the OVH meeting of December 22nd a motion was made to sponsor two OVH packet committee members as OVH representatives to the **Digital Mid-Atlantic Radio Council (DMARC)**. This motion was approved therefore OVH now looks forward to participation in **DMARC**. Packet activity has proved very popular via the OVH node and the packet committee anticipates activity to continue to increase. There were some problems running G8BPQ'S version 4.06a node software on the 12Mhz 286 computer that we started out with. That computer has now been temporarily replaced with an 8086 laptop. Mike-WV3H, provided the laptop and built a cable enabling the use of the one port on the computer with both TNC's (PK-88's). This so far has proved to be more reliable than the old configuration. Eventually new equipment may be purchased to enable the return of the loaner computers. The OVH packet committee thanks the node users for their patience during our growing pains and also thanks all those who have made suggestions or helped.

The **MANASSAS HAMFEST** will occur on June 6 C U there.

Alan-KD4KBX

Summit Amateur Radio Association

Meetings: First Thursday of the month.
Next Meeting: March 4th, 7:30 p.m. at the Bob's Big Boy on Merritt Blvd. in Dundalk, East side of Baltimore, Maryland.
Address: S.A.R.A. , P.O.Box 18404 Baltimore, MD. 21237
Repeaters: Club Owned; 224.64 MHz (WA3Z),
Club affiliated: N3HIA 224.64 & 449.075 Mhz
KS3L 224.68 Mhz., N3DRB 449.475 Mhz.
Hamfests: Carroll County Hamfest & Computer Show - July 11

Happy Holidays to all FAR member clubs and ham-types. This writer enjoyed his first FAR meeting in December, with a good attendance present. We note with interest that the WAYLARC's are back in business. I found an old photo in a QST showing a OM planning a WAYLARC event back in the 50's. Nice to see history coming back to life.

Speaking of old QST's, make sure that yours are taken care of when you go to the great beyond. Our club's collection of QST's starts from January 1935 to 1989, and is a constant help to all of our members. This all resulted from a phone call we received saying that a ham had gone into the old age home and would we be willing to come get his "old radio junk?" (or it would be thrown in the dumpster). Needless to say, we did. Moral of the story: You can't take it with you. Use your head and don't let your gear or your magazines be tossed out in the trash or sold by your family to a CUT-THROAT PROFITEER who's only concern is how much MONEY he will make at the next hamfest. Make it clear in your will what is to be done with your gear upon your arrival in Ham Heaven, and always do it with the betterment of the hobby in mind. 'Nuff said.

SARA has got some new things in the works for the New Year, starting with a possible change in our meeting structure to one that hopefully will re-kindle some of the Ham fellowship of years gone by. More details later.

Some of you in the Baltimore area know Carl-KA3UPR. He is working part-time for Amateur Radio Center at 36th and Falls Road in the city. Ernie-W3JCL, has had a collection of old gear that sat gathering dust for 20 years. Now Carl has been dusting off this stuff and getting it back on the air. The centerpiece of this collection is a complete working Collins 30K-1 500 Watt Transmitter with the 310-A exciter unit. Carl needs the operation manuals and/or schematics for these two units. If you have them or know someone who does and would be willing to photocopy them, call N3DRB at (410) 992-7745 5:00 p.m. to 9:00 p.m. You will be doing the hobby a good turn. NO, the stuff is NOT for sale, don't ask. But you can see the station there on Thursdays and Fridays.

See you on the bands.

Tim -N 3DRB

ARRL ANNOUNCES NEW SMITH CHART SIMULATION SOFTWARE

New software, ARRL MicroSmith V2.00, will be available for the IBM PC and compatible computers in January 1993. MicroSmith is a tool for designing matching networks with fixed or variable L-C components, stubmatching sections with transmission lines, etc. The software is a Smith Chart simulation program but does not require a detailed knowledge of the Smith Chart. It's all done graphically on the computer screen. The software and its accompanying 48-page user's guide were written by Wes Hayard - W7ZOI.

MicroSmith V2.00 is available from dealers who sell ARRL publications, or from ARRL Publication Sales, 225 Main Street, Newington CT 06111 Phone (203) 666-1541 or FAX (203) 665-1166. Retail price is \$39. (Add \$3.00 shipping and handling, \$4.00 for UPS).

Maryland Emergency Phone Net

Meetings: Every night, 3920 kHz, 1800 local time (All are welcome)
 Net Manager: George Korper - WD3W
 Secretary: Jim Mc Coy - N3EI
 Treasurer: Rino Masso - KC3ZJ
 Directors: WA3YLO, K3ONU, KD3JK, W3DQI (Alternate)

I hope everyone had a safe and happy holiday season, and is now ready for some serious hamming! Good DX; contests; gentle ragchewing; and, of course, some traffic handling for good measure. The MEPN is still looking for a **FEW GOOD MEN** to help us out around the state, especially in some of the far outreaches, such as the northeast, deep south, and mid-state. For information about our net you can contact any listed above or check in some night and ask the net control.

For October, the MEPN had 742 check-in and handled 111 pieces of traffic. Point leaders for the month were: W3YVQ/32, K3RPT/31, W3VBM/30, WA3WRT/29, W3SWD/28, K3ONU/27, W3BIN/25, WA4GGH/23, WA1QAA/22, N3CMM/21, K2EB/20, W3FZT/18, WA3FYZ/13, WJ3K/11, KA3WWI/9, KB3NL/8 and W3YFM/5.

For November we had 671 check-ins and 120 pieces of traffic. Point leaders for November were: W3BIN/30 (tied with) N3CMM/30, K3RPT/29, K3ONU/28, W3YVQ/27, WA3WRT/25, W3SWD/23, WA4GGH/23, K2EB/19, W3VBM/18, W3FZT/17, KD3JK/16, WA1QAA/16, KA3WWI/12, WA3UVQ/11, WA3FYZ/11, WJ3K/9 AND W3YFM/4.

Besides earning one point for each check-in, additional points are earned under the following schedule: Net Control/4, Alternate NCS/3, two points for Liaison to MDD, MPTN, Third Region, and one point for other liaisons (West Virginia, Delaware, MARS) or checking in on emergency power or mobile.

We welcome Al Gehl - KA3ZQY from Marberry, Maryland to the net. Al checked in one night, passed his first piece of traffic to Al - W3YVQ. Also checked in that night were Al - WA3WRT and Al - WA3FYZ. It seemed like an "all Al" comment session after business. We also congratulate Brian - KA3WWI who has been an active net control on both the MEPN and Third Region (the net that brings traffic into our MEPN).

George - WD3W, our net manager, has announced that he will NOT seek re-election in March, and that if elected anyway, he will not serve. The constitution says we nominate in March, and the term begins on April 15 (ominous, eh?). We will also need another director at that time, so start thinking about those positions. And if you want to throw your hat in the ring, let your intentions be known.

Finally, the MEPN would like to contact inactive or ex-members of the net so we can complete the books as far as net roster numbers and membership dates go. If you belong in this category, or know someone who does, please contact a net members so we can get the information, and perhaps get re-acquainted.

Hope to hear you ON THE AIR.

Pad - W3DQI

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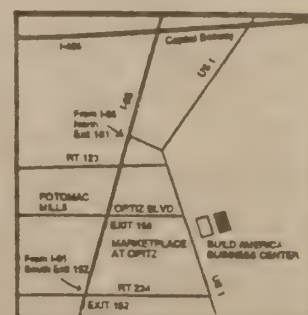
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Washington Area IBM Amateur Radio Club

Meetings: First Tuesday of the month that is a work day, 5:45 p.m. - 7:00 p.m.
 Building 182, Room 3C51 (The Radio Shack)
Info Net: Second Wednesday of each month, 5:00 p.m. 145.520
Information: Erinn Tordella - N3HSA (301) 240-6200
 The Radio Room (301) 240-6877

Last month we published a roster of the new officers for 1993. This month in addition we'd like to provide you with a listing of club responsibilities and their associated "custodians." If you have a question related to any of the following, please feel free to contact the individual associated with that area. If you're not sure whom to call, please feel free to contact either Frank Pinkl - WA3YHE or Erinn Tordella - N3HSA. This is an IBM management-supported activity (so far anyway....) falling under the jurisdiction of the IBM Club Charter, and your participation is desired and encouraged!

<u>Office</u>	<u>Name & Call</u>	<u>Phone</u>	<u>Responsibility</u>
President	Erinn Tordella - N3HSA	240-6200	General Club Business
Vice President	Frank Pinkl - WA3YHE	240-8409	Newsletter Editor
Secretary	Bill Strider - KX8I	240-8958	Minutes and Correspondence
Treasurer	Bill Strider - KX8I	240-8958	Accounting and Finances
Membership Secretary	Roel de Jonge - N3FJJ	240-8911	Membership
Management Advisor	Shirley Hayes	240-6150	Policy Adherence
HF VUW Administrator	Bill Strider - KX8I	240-8958	HF Station Control
HF USB Administrator	Frank Pinkl - WA3YHE	240-8409	HF Station Control
Packet Administrator	Frank Pinkl - WA3YHE	240-8409	Packet Station Control
IBARC Representative	Erinn Tordella - N3HSA	240-6200	IBMARCLiaison to M.C. RACES

Erinn-N3HSA

Baltimore Amateur Radio Club

Meetings: First and third Wednesdays of the month, 7:30 p.m.
 At the Dulaney Valley High School, 255 Padonia Rd, Cockeysville, MD
Repeaters: W3FT/R pm 146.670/.070
Information: Contact BARC voice information line, HAM-FEST (426-3378)
 Out of the Baltimore area, call 1-800-HAM-FEST
Mailing Address: P.O. Box 120, Reisterstown, MD 21136

SKYWARN Spotter Training Classes

The Baltimore Amateur Radio Club is hosting a Basic SKYWARN spotter training class on Wednesday, February 17. All are welcome. The class will be held at the Owings Mills Volunteer Fire Company, located on the west side of Baltimore just off Interstate 795. There will be plenty of room. Refreshments at 6:30 p.m. and class runs 7 - 10 p.m. Pre-registration is required. For info, Call HAM-FEST or outside the area call 1-800-HAM-FEST.

Phil Hebert - N3CDY

Montgomery Amateur Radio Club

Meetings:	1st and 3rd Wednesdays of each month at 7:30 p.m. Executive Office Bldg. Montgomery Co. Government Center, 101 Monroe St., Rockville, MD. Park underground on G-2.
Repeater:	146.355 in (Rockville & Germantown)/146.955 out (Rockville)
Mailing:	M.A.R.C., P.O. Box 611, Gaithersburg, Maryland 20884-0611
Information:	Jeff Horlick - KZ3F (301)258-0112; Steve Todd - K2IYQ (301)253-4172
Training:	Jane Rosenthal - KA3YWU (301) 762-6262; Dick Hayman - K8DML 840-8251

This has been a time for "Transitions", and the Montgomery Amateur Radio Club (M.A.R.C.) is no exception to this rule. At the Club's first regularly scheduled business meeting in December (12/02/92), Steve-K2IYQ convened the meeting PROMPTLY at 7:30 p.m. and CRISPLY passed the M.A.R.C. gavel to Al-NW2M, 1993 Club President. After introductions all around for the "new" Officers and Directors at Large, Al IMMEDIATELY got down to the business of Club business! (What is it anyway about the annoying efficiency of these "2-Land" Amateur call signs? Trying to make the rest of us look bad?)

Jeff-KZ3F reported that as of 12/2/92, M.A.R.C. had an all-time, record-breaking membership base of 303, with 163 new or renewed members at this "snapshot" in time.

M.A.R.C.'s ever-faithful Treasurer, John-KA3QFL, brought the Standing Room Only crowd to its feet with his announcement that once again, M.A.R.C. will go down in Amateur history with a budget surplus (more than your Uncle Sam can say...eh?). Another round of applause, please, for KA3QFL, who has kept M.A.R.C.'s books audit-worthy for as long as the Amateur Reporter remembers.

Another "quiet" but noteworthy contribution benefiting all M.A.R.C. members is the on-going constellation of tasks performed by Bob-WK3C, the Club's Software Librarian. Bob maintains and constantly updates the Master Index of Ham-related public domain or shareware application programs belonging to the Club. At the first M.A.R.C. meeting in December, Bob reminded the membership that "their wish is his command." (Not bad for \$1.00 per disk!) Bob will copy one or more of these software programs to a 5.25" or 3.5" disk and provide you with IBM-, Mac-, and Commodore 64-compatible application programs related to Amateur Radio theory, Morse Code, QSO logging, etc. topics...three cheers for WK3C!

Yet another "steady" contribution was made on December 5 when Pierre-KB3ZM and his corps of Volunteer Examiners provided their services to prospective candidates for licensing or upgrading in an ARRL-VEC examination session at Montgomery College, Germantown, MD. One candidate upgraded to codeless Technician, one to Advanced, and one to Extra! The volunteer examiners who participated were: Walt-KX3U; Steve-K2IYQ; Mark-NW3S; Ari-KW3R; Jeff-KZ3F; Tom-KK3A; Bob-NK3J; and Pierre-KB3ZM.

After a year or so of showing few vital signs, the M.A.R.C. Newsletter has been revived and found to be alive and well, thanks to the volunteer efforts ("shared responsibility") of Mark-N4EOC, Howard-WB3KHQ, John-KA3QFL, and Jeff! Mark and Howard will serve as contributing writers/editors, while John will perform the actual Desk-Top Publishing of camera-ready copy, and Jeff will once again interface with the print shop, as well as support the distribution (mailing) to M.A.R.C. members.

At the meeting on December 16, a joint multimedia program was presented by Al-KN3U and Ross-WA2WDT, describing their intense efforts to assist Federal, State and Dade County Emergency Management agencies in the immediate aftermath of Hurricane Andrew. Employing a combination stand-up lecture and slide-show format, Al and Ross dispassionately but eloquently conveyed to club member a sense of the raw devastation wreaked upon South Florida. Al-KN3U's efforts occurred primarily during the critical "response" phase, while Ross-WA2WDT was hand picked to spend three full weeks supporting the "recovery" phase. Together, they assisted to restore all forms of communication - including RF, satellite, and cellular. They restored and linked UHF/VHF repeaters to facilitate Amateur and Government

(Continued)

Metropolitan Communications Network

Representing Six Meters in the Greater National Capital Area

Meetings: Quarterly, on the second Sunday of the month.
Time and place to be announced.

Repeater: N3AGB/R, 52.250 MHz in; 53.250 MHz out.
Accessible on 147.36 MHz and 444.35.

On-the-air: Saturdays at 1900 hours EDT

Mailing: Bob Sporn - WA3GGO, 9927 Cottrell Tr, Silver Spring, MD 20903

Information: Bob Sporn - WA3GGO (301) 434-1719

By courtesy of the Alexander Graham Bell Telephone Pioneer's Repeater, our 6-meter FM repeater is also accessible on 147.36 and 444.35.

At our December meeting we learned our Treasurer, David G. Bennett - KE3AB is leaving for Florida, and our President, Robert D. Milligan - KI4MB is beginning to talk about retirement. Fortunately we do have several prospective new members in the club. Fred Erskins - KX3Z was one of our guests.

The following officers were elected for the year 1993:

President: Chris Kushay - KA3LJR
Vice Pres: Bron R. Kidwell - N3AGB
Acting Treas: Marvin T. Story - N3FBO
Secretary: Bob Sporn - WA3GGO
Trustees: John B. Creel Jr., -WB3GXW
Marvin T. Storey - N3FBO
C.J. Arcelesi - K3WUR

THE SUNDAY MORNING COFFEE NET (50.4) MHz at 0900 Hours EST.

On Saturday the 12th of December, the band was open and Stanley Brigham - W3TFA worked Teas, Oklahoma and Louisiana. We have had several inquiries about obtaining 6-meter gear, and expect some new check-ins shortly.

MARYLAND FREE STATE SIX METER SIDEBAND NET (50.125 MHz) Sundays at 2000 Hours

This net is flourishing, with ever new check-ins. With a solid core of regulars, the Net is growing.

Bob - WA3GGO

Montgomery Amateur Radio Club - Continued

communications with other official emergency organizations. Given the nature, scope, and importance of KN3U's and WA2WDT's overall mission, M.A.R.C. was truly privileged to receive a first-hand account.

Matt - N3LFZ announced that M.A.R.C. will be conducting a "foxhunt" on Saturday January 30. If you hurry, there should still be time to sign up!

Two of our M.A.R.C.onians were singled out in the January 1993 QST for their respective accomplishments. Jeff - KZ3F was cited for having joined the rather exclusive ranks of the DXCC community. In a news brief accompanied by a quarter page photo, Steve - K2IYQ was shown demonstrating the helical feed system of his satellite antenna at the 10th annual AMSAT symposium in Washington, DC last October. Congratulations are in order to both Jeff and Steve.

Until next time, be sure to remain "clear and listening on frequency" to 146.955 MHz.

Erinn - N3HSA

Prince George's Wireless Assn.

Meetings: First Working Tuesday of each month, 7:30 p.m., American
Red Cross Service Building, 6206 Belcrest Road, Hyattsville, MD 20782
Club Station: K3CEZ
Mailing: 4109 Kennedy Street, Hyattsville, MD 20781
Information: Frank Holton - WA3ZMW (301) 927-1245

Prince George's Wireless Assn. is looking forward to its first meeting in this new, and hopefully exciting, New Year. We hope to participate in more events this year than last. There are new members coming in to the group, which makes it more interesting.

Frank - WA3ZMW, our President, is compiling an Archives for PGWA, including history of the group, all about the special events and pictures of years past. Frank also is planning surprises for our meetings to make them more enjoyable.

Hersh (Dan) Miller - W3SWD is busy structuring a new Emergency Communication call-up list of members for any disaster that

may arise with Red Cross intervention. The list takes in availability of members both during and after working hours. Some of us are retirees, which makes us available most any time. Also, like myself, I live only one block away from the Red Cross building.

PGWA and its members are well pleased with the new Cushcraft HF beam and the eleven element 2-meter yagi which is mounted above the HF beam. The two 2-meter consoles are set up nicely with a new Yaesu and an older Kenwood base rig. Let's try to adhere to our New Year's resolutions for a change. Here's to a great year for Amateur Radio.

Ken Easton - N3HLY

YORK SPRINGFEST

March 14

York, Pennsylvania

**The 6th Annual York Springfest (Ham & Computer Fest)
Will be held on Sunday, March 14 at the York Fairgrounds.
Indoor tables and blacktop tailgating, food and refreshments.
Inside tables \$15 & \$20, Tailgating \$5 per space**

Admission \$4

Age 12 and under and unlicensed spouse free.

ARRL VE Exams - 8:00 a.m.

Talk-in on 146.37/97 and 447.275.

**Advanced info and registration call (717) 843-7864
Or write: York Springfest, P.O. Box 526, Red Lion, PA 17356**

Note: The York Springfest has been moved to the Old Main Building at the York Fairgrounds York, Pennsylvania. More inside table space & larger blacktop tailgating area.
Easy access from I 83 or Rt 30.

Maryland Mobileers

Meetings: First Friday of each month at 7:30 p.m.
Anne Arundel County Emergency Operations Center, Crownsville, MD
On-the-Air: Every Monday night at 8:30 p.m. on 146.205/805
Address: P.O. Box 935, Severn, Md 21144
Information: Rod Mann (410) 647-0005

Santa has come and gone, all the new radio toys (read HT's, etc.) have been tested, and we are all ready to have a good 1993.

Maybe volunteering does pay off. At the Mobileers' annual holiday dinner, Bonnie Andersen - WA3UMV who, along with her OM, Bob - W3HEI, has coordinated the dinner for the last two years, won the grand prize - a brand new Kenwood TH-28A hand-held.

The Maryland Mobileers have re-instituted the club's Ham-of-the-Year Award. At the

holiday dinner in December, outgoing president Bill Howard - WB3V presented a beautiful plaque to the 1992 recipient, John Kohl-KO4A. (The author knows for a fact that John has since remodeled his entire ham shack to properly display the plaque.)

It's never too early to think about Field Day. Now is the time to remind key non-ham members of the family that Field Day occurs the 4th weekend in June.

Jim - N3EI

WAYLARC

Washington Area Young Ladies Radio Club

Meetings: Quarterly - March, June, Sept, Dec
Location will generally be alternated between Maryland and Virginia
Contact: Pat Gossard - N3KGY (301) 927-5537.

The newly rejuvenated WAYLARC is growing rapidly. Seventeen people attended the December 12 holiday luncheon and the latest membership count is up to 25. We hope to see many more YLs at the meeting in March.

A weekly net was started on January 4 but the selected repeater, on 147.18, proved to be inhospitable to 4-land members. A change in frequency is contemplated. The time is 7:30 p.m. on Monday evenings. Listen for N3KGY.

Election of officers resulted in the following:

President: Susan Svenson - N3MPT
Vice Pres: Vikki Gigante - KA3PVS
Secretary: Pat Gossard - N3KGY
Treasurer: Irene Akers - W3RXJ
FAR Trustees: Ethel Smith - K4LMB
Maureen Mulrooney - N3JNE

An active schedule is planned. One project proposed is the "Elmiraing" of a girl scout troop. A WAYLARC "presence" is planned for most of the major hamfests held in the local area and Pat Gossard - N3KGY volunteered to edit a WAYLARC newsletter. The first issue will be in the mail by March 6 and will contain up-to-date information on the upcoming meetings.

The March meeting is tentatively set for March 13 but the location is yet to be determined. Presumably it will be somewhere close to the Beltway in Maryland.

The June meeting will be a family picnic in Virginia. Tentative date is June 12. Be sure to put both of these dates on your calendar and pass the word to all the area YLs. This is going to be a great organization.

Herndon Repeater Group

Meetings: On-the-air meetings every Monday at 9:00 p.m.
 Repeater: N4FSC/R 144.71/145.31 MHz
 Packet BBS: 145.03 MHz (BBSHRG)
 Mailing: Herndon Repeater Group, P.O. Box 5073, Herndon, VA 22070
 Training: Michael Weber - WB8RDN (703) 450-2304
 Information: Michael Rosati - N4FXP (703) 481-8380

Technical Seminar: Join the Herndon Repeater Group for a Technical Seminar on Amateur Satellites, hosted by Steve - KA1LM on Sunday, January 31, 1:00 - 4:00 p.m. at the Eastern Loudoun Regional Library in Sterling Cascades.

General Class Course: HRG's second annual General Upgrade Class will begin on March 27 and run six weeks, through May 1. An exam opportunity is scheduled May 15 at the conclusion of this class. The course will be held on Saturday mornings from 9:00 a.m. - 12:30 p.m. at a Herndon location. To enroll, you must have a Technician Class license. Code practice will begin at the 5 wpm level. Register with Mike - WB8RDN. Seating is limited to 25 students. The instructors will be Terry - AB4UM (code) and Jerry - AC4JV (theory).

Net: Join HRG for its popular Monday evening net on the Herndon 145.31 repeater at 9 p.m.

Packet: The HRG Packet BBS (BBSHRG) is operating nicely on 145.03. Many members also utilize the new OVH node on .03. Thanks to Sysop Bill - N4WJN for all the hard work running the BBS.

Upgrades: Congratulations to the following HRG members who upgraded at either the November or December HRG sponsored exam sessions:

Tech: David Eisenberg, Janine Wingard, Bryan James, Dennis Wilson, Priscilla Durhan, Patricia Burns, Scott Croom, Kevin Croom, Linda Duke, Timothy Duke, Ruth Bower, Jushua Wise, Robert Gresham.

Tech Plus: Ken Senser - KD4UNS, Earl Rigsbee - KDRUNT, Frances Pike - KD4UNV, Ron Robins - KD4UNW, Norm Wingard - KD4LTH, Robert McCulley - KA3UIE, Charles Parsons.

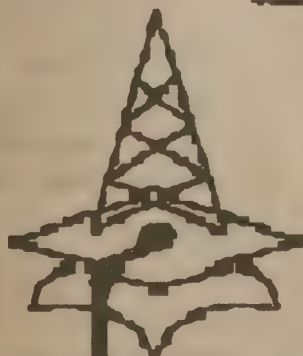
General: George Bratina - KD4UNU

Advanced: Michael Rosati - N4FXP

Extra: Louis Luh - KQ4EY

Exam Dates: HRG will sponsor ARRL/VEC exams in Herndon on February 6, May 15, August 28, and November 20. Register with Mike - WB8RDN.

Mike - WB8RDN



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- VECTRONICS HF600-QSK RF Amp. (Oct. CQ,p.16,17; 73 p.70).....\$1289!
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Stafford Amateur Radio Association

Meetings: Weekly, 0730 a.m. every Saturday morning, at the McDonald's east of the I-95 exit to Stafford Courthouse
Repeater: N4SMP/R 145.27 out 144.67 in. Autopatch for members.
Mailing: c/o George Gautney - N4SMP, 9 Skyview Ct., Stafford, VA 22554-5232
Information: Dick Kirby - W4GFB (703) 720-0406 or George Gautney - N4SMP (703) 659-5720
Packet: 145.07, W4GFB-2

Charlie - K4KBA continues to be the sole support for local Volvo mechanics and used Volvo dealerships. In our most recent SARA morning meeting on "a chilly morn made warm by the reception of the Stafford Area Repeater Association members who gathered at their favorite breakfast place," members were regaled with the latest tales of Volvo woe. (No - I didn't write that remarkably purple prose. It came out of my packet BBS, but it was penned . . . er, typed by a Marine whose name shall remain unknown, but whose call is KB4TRV and on the air moniker is MAJOR MIKE.) Anyway, now that we've all lost our train of thought, it seems Charlie recently managed to coax Jim - N4LZJ to follow "Charlie down the primrose path to buying used Volvos. As Charlie was also listed among the expected but missing (I'll explain this later), it was thought that Volvoitis had struck again."

Anyway, as it turns out, "conspicuous if only by their absence were Spike - K9MX, and Jim - N4LZJ." Given the choice, I'd leave you to wonder what that was all about, or why it was even interesting, but our Marine correspondent has threatened to broadcast his version to the whole world, so I thought it best that I print it here. He wrote that "Spike later called in and said that he had overslept because of a failed battery in his clock radio," and that it "was suspected that the actual cause may . . ." Well, that's enough of the story.

And what you've just read is a pretty good picture of what Saturday breakfasts are really like at SARA - informal, irreverent, and lots of fun. You really should stop by.

On a more serious note, or at least one more directly related to amateur radio, Major Mike - KB4TRV is trying to coordinate with the Stafford schools to participate in the amateur radio portion of the Shuttle flight in March. If you're interested, contact anybody in the club and they'll get you in touch with him. Or better yet, stop by for Saturday breakfast.

Our next license exam session is on 29 January, and the next one after that is on the last Friday in March. Our test sessions have been supported enthusiastically by Ham Radio Outlet (HRO) in Woodbridge. They've donated administrative supplies and helped us advertise the sessions. And SARA is very well supported by the Radio Shack on Garrisonville Road, where every SARA member gets a 10% discount.

Oh - and those Saturday breakfasts. We start arriving about 7:30 am and are generally around until 8:30 to 9:00 at the Family Restaurant (formerly the Nothin' Fancy) on Route 1, just South of Stafford Courthouse. Hams, prospective hams or just interesting folks are always welcome to join us.

Spike - K9MX

1993 Annual Spring Banquet

Sponsored jointly by
The Foundation for Amateur Radio & the Quarter Century Wireless Assn.
Greenbelt Marriott Hotel
Saturday, May 8

This is an area-wide activity, open to ALL Amateurs
Mark your calendar right now.

Anne Arundel Radio Club

Meetings: First and Third Thursdays at 8:00 p.m.
Davidsonville Family Recreation Center, Queen Anne Bridge &
Wayson Roads off Md. Rt 214 near Annapolis

On-the-Air Thursdays when there is no club meeting, 2030 Local on 147.705/105
Tuesdays at 2030 Local time on 28.410
Maryland Slow Net (MSN) every evening at 1930 on 3.7170 MHz
The Aviation Net on 147.075 at 8:30 p.m. on the first Monday of each month.
The Packet Net on Wednesdays at 9:00 p.m. on DCCONV Ch/13

Address: P.O. Box 308, Davidsonville, MD 21035

Information: Margaret (Holly) Bevan - N3BMB (301) 923-0229

The Anne Arundel Radio Club Christmas Party was, as usual, a great success. Over 100 persons (club members, families and guests) gathered on the evening of December 17th in a festively decorated clubhouse for their fill of party spreads, punch and the many delicious desserts brought by attendees. Then Santa made an appearance with gifts for each child by name. The adults who brought gifts had fun selecting packages from under the tree. It was a most enjoyable affair.

AARC took part in the third "First Night Annapolis" on New Year's Eve. It was the most successful celebration yet. Annapolis was deluged with visitors who appeared to enjoy the entertainment of hundreds of performers in the streets, storefronts and auditoriums of Old Town Annapolis. The Club's Message Center had a super location in a newly renovated building (now a Champion Realty Office) in the heart of the activity on Main Street.

The first trick was to install an 80-meter antenna on a roof that may have been 60-feet deep. Most messages are transmitted on 75/80 meters for the National Traffic System. One of the club's telescoping tripods with a 15-foot extension raised the center of the inverted vee to over 30-feet above the roof. A second 2-meter J-pole antenna for 2-meters was less of a challenge. The Center was open for four hours and AVERAGED over 75 messages per hour. Over one hundred were sent over the air during the evening, and the rest went on New Year's Day by both CW and packet.

The station included two rigs, face to face, just inside a picture window. The rotating crews seemed to have fun. Some worked nearly the whole evening, and others did some touring on short breaks. The crew of twelve was

supplemented by the Champion staff. Many club members took the opportunity to stop and visit. (All info on First Night Annapolis was taken from a report by the Coordinator, Tony - WA3YLO.)

At the AARC Clubhouse on December 12th, Bob Israel - WC3I, Oscar Ramsey - NV3G and Charlie Tiemeyer - W3RMD administered 28 exams to 16 persons. Eighteen exams were passed and there were 12 upgrades. Nancy Alley - NT3Z was the coordinator. Gordon Davids - WJ3K and Lew Hendrixson - N3IJK graded. Bettye Tiemeyer - K3VRZ and Holly Bevan served as registrars. The next test date at the AARC Clubhouse will be February 13th. Registration starts at 12 Noon; tests begin at 1:00 p.m.

Randy Berry - N3LRX upgraded to Tech
(with code.)

Holly - N3BMB



LOOK ON THE BRIGHT SIDE ---- AT LEAST HE CAN
WORK C.W.

Hungry Hams

The listing of Amateur Radio Eatin' Meetin's was initiated by Perry Crabill - W3HQX and has proven to be one of our most popular features. Do you know of other groups that would like to be listed? We will try to keep it up-to-date.

MARYLAND

Cumberland

1st Saturday, 9:00 a.m.

Barton's Reataurant

Route 220 South

Ellicott City

2nd Saturday, 9:00 a.m.

Columbia Amateur Radio Assn

Double T Diner, Rt 40 & Rolling Road

Info: Dionne Frank, KA3ZDL 531-2933

Glen Burnie

Third Wednesdy

Maryland Mobileers ARC

Homestyle Family Buffet

Laurel

1st Saturday, 11:30 a.m.

Laurel Center Mall

Fountain Cafe food service area near

Montgomery Ward (US 1 & Cherry Ln.

Every Friday Noon

Ashton Radio Communications Society

Shoney's Restaurant, Route 1

Talk-in 147.00/146.40 or 443.150/448.150

Odenton

Second Saturday after monthly meeting

Maryland Mobileers ARC

Breakfast at Rick's Cafe, Odenton

Waldorf

Every Saturday, 8:00 a.m.

Southern Maryland ARC Breakfast

Info: Hank - W3FVD

Wheaton

Every Wednesday, 11:30 a.m.

Anchor Inn

2509 University Blvd. W.

West Virginia - Berkeley Springs

1st Tuesday 11:45 a.m.

Appalachian Restaurant

Info: Wendell Pugh - WA3BKG (304) 258-5199

or Ward Crabill - W3JGK (304) 258-5767

VIRGINIA

Annandale "Hungry Hogs"

Every Tuesday, 11:15 a.m.

Shakey's and Horn & Horn (Alternate weeks)

Parking lot 7201 & 7203 Little River Turnpike

Information: "Frosty" Akers - W3PT

Fairfax

Every Tuesday, 11:15 a.m.

Dino's Den

9534 Arlington Blvd

(Route 50 at Route 29)

1st Saturday after 1st Wednesday 7:30 a.m.

Early Morning Chow Down at La Peeps

Off Route 123 in Fairfax

1st Wednesday of each month after work

Silver Platter Restaurant on Route 236

Info: Dale - N4WWL or Gil - K7OR

Manassas

2nd Saturday 8:30 a.m.

Mikes Diner on Rte 234.

Info: John- N4YOB 791-5995.

Stafford

Every Saturday, 7:30 a.m.

McDonalds East of I-95 exit to Courthouse

Rt. 1, South of Stafford Courthouse

Staunton

Every Friday 12:00 Noon

Kathy's Restaurant

Greenville Ave. & Statler Blvd (Rts 11 & 261)

Vienna

Every Saturday 12:00 Noon

MADRAS Lunch Bunch

Taco Rio Grande, Vienna

Winchester

2nd & 4th Wednesdays, 12:00 Noon

Best Western/Lee - Jackson Restaurant

711 Millwood Ave. (Rt 50 W of I-81 Exit 80)

Info: Perry Crabill - W3HQX via 146.82 Rptr

Phone (703) 662-7526

Charlottesville

Every Wednesday, 11:00 a.m.

At the Bonanza restaurant

Rio Road & Route 29 North

SHACK SALES

Noncommercial advertising of Amateur associated equipment is available to subscribers of AUTO-CALL at a rate of 3¢ per word -- with a \$1 minimum. Commercial vendors and nonsubscriber rate is 17¢ per word - with a \$5.50 (1 inch) minimum. Special headings or special spacing (e.g. one item per line) may be used but such ads will be charged at the column inch rate. Estate sales for Widows Assistance handled by a FAR club will be published without cost.

Full name and address must be provided with each ad but need not be published. No ads will be accepted over the telephone and all ads must be pre-paid. Since no effort is made to investigate advertisers, no warranty can be implied.

Copy must be received by the 5th of the month preceding publication.

WIDOWS' ASSISTANCE PROGRAM

The Foundation's For Amateur Radio's Widow's Assistance Program has been in operation for many years and has accomplished a great deal for the families of our Silent Keys. The program offers to help widows (and other family members) evaluate and dispose of radio equipment in an Amateur's estate. Listings of Estate Sales are carried in the Shack Sales of Auto-Call magazine free of charge, and major items may be offered for sale at local hamfests, etc. No fee or commission is charged the families.

One other option that should be considered is donating equipment to a club and taking a tax write-off for the charitable contribution. The Widow's Assistance Program can help you find a club that will make good use of the equipment. Some commercial operations are also willing to purchase the complete list of equipment and clear everything out at once. This may be the quickest solution in disposing of an estate.

Every ham is encouraged to maintain a list of his/her radio equipment, with realistic evaluations, and instructions on the disposition of any specific items. Keep your family advised of your wishes.

For more information about the Widow's Assistance Program contact any of the local Foundation member club or call Tony Young - WA3YLO at (301) 262-1917..

FOR SALE: DRAKE TR-4C Transceiver with MS-4 speaker and AC-4 power supply.

All units in excellent condition with I.B.S. \$275
Also HEATH 301 Receiver. \$100

Cliff - W3LVC, Telephone (410) 796-1070,
6904 Montgomery Road, Elkridge, MD (02)

"QTC"

The story of a sea going "Sparks"

Paperback book

A nostalgic salute to the old "Sparks" operators. "Sparks" (lone radio officer on ships) is fading away with the 20th century. This book, *QTC* (I have a message for you) is a nostalgic salute to him. His SOS's saved a million lives.

Fellow Sparks enthusiastically applaud:

"Outstanding," Kemp Richter - K7UQH; "Can't put the book down," Ken Johnson W6NKE; "Best book ever written about marine operators," Doug Stivison - NR1A. ... Reviewers, too: "Nostalgic spirit surrounds tales told," *Popular Electronics*; "Fascinating Book," *Radio Bygones*, U.K. "You just have to see QTC," *Amateur Radio Action*, Australia.

HARDCOVERS SOLD OUT! BUT 80 PAPERBACKS

STILL AVAILABLE - \$11.00 total cost.

Write SEQUOIA PRESS/KA5HCX

2502-S Cockburn, Austin, Texas 78745

Phone 512-442-1311.

If you would like a personal inscription, give your callsign. Ray Redwood - KA5HCX

(03)

NORM'S ROTOR SERVICE

Rebuilt Rotors, Parts & Service

Call Norm Jeweler - K3LYW

5263 Agro Drive

Frederick, MD 21701

(301) 874-5885

Need antenna or tower work done?

Call L. Chertok - W3GRF.

(301) 297-4888

G AND G ELECTRONICS

OF MARYLAND

8524 DAKOTA DRIVE, GAITHERSBURG, MD.
20877

SPECIAL SALE

We have acquired the new
equipment inventory of a
ham radio store that is
closing.

While supplies last, we are
offering hundreds of
accessories from ICOM, AEA,
KENWOOD, YAESU, LARSEN,
RADIO WKS, HUSTLER, MFJ,
and others at prices
well below normal retail.

Remember,
quantities are limited, so
CALL NOW!

OPEN MONDAY & TUESDAY 11 AM - 9 PM
WEDNESDAY 11 AM - 5 PM & BY APPOINTMENT
301-258-7373

SHACK SALES

Call JWO SERVICES

Discounts on all! ARRL, AMECO, Callbook, etc.

1993 ARRL Handbook (List \$25) 1-9 \$22.50; 10-up \$21.25

1993 North American or International Callbooks,

(List \$29.95 each) Only \$23.95 each.

NOW YOU'RE TALKING (List \$19) 1-9 \$17.30; 10-up \$16.25

W3IS Code Oscillators 1-9 \$5.50; 10-up \$5.15

AMECO K-1 Code Key (List \$6) 1-9 \$5.50; 10-up \$5.15

AMECO Brass Code Key (List \$11) 1-9 \$10; 10-up \$9.35

1993 PASSPORT TO WIDEBAND RADIO (List \$17) Only \$15.60

1993 World Radio and TV Handbook (List \$20) Only \$18.25

NEW! Understanding Basic Electronics

(List \$17) 1-9 \$15.60; 10-up \$14.45

NEW! ARRL Antenna Compendium 3

List \$14) Only \$12.90

Also, accompanying software, IBM (List \$10) Only \$9.15

NEW! ARRL Antenna Compendium 3 (List \$14) Only \$12.90

We specialize in large quantity orders for clubs & classes.

Only pay 30¢ handling per order plus actual shipping cost

New 1993 Free Catalog of Savings!

JWO SERVICES

Worldwide Shipments Mastercard/Visa

12 Hickory Place Camp Hill, PA 17011

Phone (717) 731-4747 Fax: (717) 730-9373

Daily to 10:00 p.m. and weekend afternoons

(02)

WANTED: Rohn 45G or any larger commercial guyed or self-supporting tower. I will take down and remove. Contact Dave - N3EJT (301) 474-7405, College Park, MD (12)

WANTED: CALLBOOKS

Amateur, Broadcast or Government, 1900-1930. Bob Arrowsmith - W4JNN, PO Box 166, Annandale, VA 22003 or phone collect (703) 560-7161. (01)

WANTED: Collections of electronics magazines pre 1965 - Radio-Electronics, Radio News, Electronics, etc. Also seeking audio and vacuum tube related manuals and literature. Joe - N4WQC, (703) 256-2468 voice/FAX Box 19302, Alexandria, VA 22320 (02)

FOR SALE: 140 foot Rohn 25G look-a-like guyed tower. Rohn 55G, four straight, 1 base. 50 foot AB105 tower. 10KW gas generator 120/208, 60 cycles, 1800 rpm, Hercules four cylinder, needs carb \$400 Hustler 5BTV Vertical \$50 Used Andrew LDF5 7/8" Hardline, 60 to 350 foot lengths. Used Andrew 7/8" connectors. Dave - N3EJT (301) 474-7405 College Park, MD (02)

The **AMATEUR RADIO NEWS SERVICE** is an organization of publishers and editors of Amateur Radio newsletters and members engaged in public relations. Its purpose is to assist editors in any way possible. For information, write to Lee Knirko - W9MOL, 833 Park Plaine, Parke Ridge, IL 60067&Swp)

Mid-Atlantic Antique Radio Club. Become a part of one of the country's fastest growing vintage radio clubs. The Mid-Atlantic Antique Radio Club is an active group of radio collectors, restorers and historians. For a sample newsletter, write to Joe Koester at 249 Spring Gap South, Laurel, MD 20707. Phone (301) 725-4229. (Swp)

FOR SALE: Brand new Isotron 80-meter Antenna \$35
Also the following LH Switching Power Supplies, Please call for price.

Model	Watts	Output 1	Output 2	Output 3	Output 4
MM44-EO598/115	750 watts	5v @ 150a	12v @ 11a	5v @ 5a	12v @ 5a
SM71-1/115	750 watts	5v @ 150a			
LM34-12Y2Y1/115	350 watts	5v @ 50a	12v @ 10a	12v @ 5a	5v @ 5a
SM24EO689/115	1000 watts	5v @ 150a	12v @ 8a	12v @ 8a	5v @ 4a
TM23-13Y3Y/115		5v @ 20a	15v @ 4a	15v @ 4a	
TM41-1/115	200 watts	5v @ 40a			
MM24-12Y2Y2Y2Y/115	375 watts	5v @ 75a	12v @ 8a	12v @ 3a	12v @ 3a
MM73-12Y2Y2Y/115	375 watts	5v @ 75a	12v @ 10a	12v @ 10a	
MM31/1/115	750 watts	5v @ 75a			
DMX33-12Y2Y2Y/48	300 watts	5v @ 50a	12v @ 50a	12v @ 9a	

Call Burt - K2STV after 6:00 p.m. at (301) 330-8274, Gaithersburg, MD (02)

SHACK SALES

WORLD RADIO, Amateur Radio's monthly newspaper can be delivered to your doorstep for only \$14 per year (\$24 overseas). Get the latest on how your fellow amateurs use their hobby to help others. Regular features are Contest and Hamfest announcements, Aerials, Amateur Satellites, Continuous Wave, Digital Bus, DX World, Search & Rescue Communications, FCC Highlights, Mobile, New Products, Propagation, QCWA, QRP, Station Appearance, Traffic, VE Exams, International News. Send your subscription to WORLD-RADIO, 520 Calvados Avenue, Sacramento, CA 95815. (Swp)

IDEAL HAM LOCATION! Highest point at 7 Corners in Falls Church. Solid brick rambler on hill top. 20,000 square foot lot, 3 bedrooms, 2½ baths, excellent storage in walk-up attic, 2 fire places, large daylight recroom, dark room, computer room and work room. To see, call Joan Sutton at Century 21. Office: (703) 241-2100 Home: (703) 237-7710, Falls Church, VA (02)

ARRL is pleased to offer a new publication for electronics beginners, called *Understanding Basic Electronics*. Written in easy, friendly style, the 320-page book provides clear and concise explanations of electronics concepts and step-by-step solutions which come alive with graphics. *Understanding Basic Electronics* provides a solid foundation for both hams and prospective hams. Price is \$20 plus handling and US Mail shipment from ARRL Headquarters, 225 Main St., Newington, CT 06111 (Swp)



Licensed at least 25 years ago?

And licensed now

Then you should belong to the
Quarter Century Wireless Association

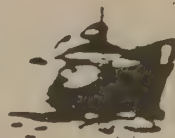
For information write
159 E 16th Avenue
Eugene OR 97401-4017

WANTED: HAM EQUIPMENT AND OTHER PROPERTY. The Radio Club of Junior High School 22 NYC, Inc. is not only the Big Apple's largest Ham club but also the nation's only full-time non-profit organization working to get Ham Radio into schools around the country as a theme for teaching, using our EDUCOM - Education Thru Communications - program. Send your radio to school. Please look over whatever unwanted equipment you may have and call us. Your donated Amateur or related equipment, which will be picked up or shipping arranged, means a tax deduction to the full extent of the law for you, as we are an IRS 501(c)3 charity in our twelfth year of service. Your help will also mean a whole new world of educational opportunity for children around the country. Radios you can write off, kids you can't. Please write the "22 Crew" today: The RC of JHS 22, POB 1052, New York, NY 10002. 'Round the clock telephone (516) 674-4072 and FAX (516) 674-9600. Young people, nationwide, can get high on Ham Radio with your help. Meet us on the WB2JKJ CLASSROOM NET: 7.238 MHz 1200-1330 UTC and 21.395 Mhz 1400-2000 daily. (02)

FOR SALE: DREAM LOCATION . . . \$230K

All directions clear, 25 miles westward. Six room all brick rancher. 1½ baths, 30 x 30 attached brick garage. 35 x 40 new out-building. Two level acres. Rural and will remain rural. Near Howard County Fair Grounds. One city block west of route 32 and 99 intersection. Retired and going west. Guy Lalic-W3OIV (410) 489-5037 (C01)

Chapter X



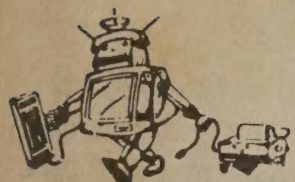
Society

of Wireless Pioneers

THE INTERNATIONAL ORGANIZATION
OF PROFESSIONAL RADIO TELEGRAPHERS

For Information Call
(703-536-9537)

SHACK SALES



COMPUTER CORNER

FOR SALE: Commodore VIC-20 Computer. Includes 8K RAM Cartridge, Cassette Drive, 300 Baud Modem, VIC-1525 Graphic Printer, VIC-20 Cassette 6 Pack (Finance, Loan, Typewriter, Home Inventory and Expense Calendar), RS-232 Interface Board, VIC-1213 Machine Language Monitor Cartridge, Cardboard/3 Bus Expansion Board, Joystick, Terminal Emulation Software, Games, Programmers Reference Guide and documentation \$20
MOTOROLA 6801L1 Development Board. Includes built-in power supply, RS-232 Terminal Port, MC146818 Real-Time clock/Calendar, 16K EPROM (2716), MC6840 Programmable Timer, two MC6821 PIAs, Cabinet, Motorola MC6801 Reference Manual, LILbug Monitor Manual, MC6801 Instruction Set Reference Card, Board Memory Map \$20
 Would make a good "starter" computer for children. Dave Parks - NW3U (410) 744-0959 Evenings, Catonsville, MD (02)

FOR SALE: 80286 Modular Circuit Technology motherboard with math coprocessor, one Mb on-board memory, six 16-bit slots and two 8-bit slots, and 6, 10 & 12 MHz operating speeds. User's Manual included \$125
 New Conner 40 Mb IDE disk drive (CP3000). \$125
 Contact Dick - K3TND (301) 384-6366 after 6:00 p.m., Silver Spring, MD (02)

FOR SALE: Get on AMTOR/Packet or catch all those great WX FAX photos.
 Kantronics KPC-2 modem \$100
 with Superfax II \$25
 Hostmaster II \$45
 Hostmaster 64 \$30
 AEA-FAX \$70
 Stan - W3QBK (301) 434-7676, Langley Park, Virginia (02)

SLIDE RULES WANTED

All Types for Museum Display

Bob Hill - NK3W

200 Agnes Lane, Linthicum, MD
 (410) 789-4772 Zip 21090-170205
 (02)

FOR SALE: Ham TV Station receive/record or home entertainment VCR set-up:

GE portable video recorder with new battery and matching 14-day multi-programmable tuner unit. Recorder recently professionally cleaned and re-conditioned. Like new matching Panasonic color camera with tripod. All accessories—AC adapter, hook-up cables, etc. Great value. Everything for \$395 or best offer. Jim - W6NRJ. (301) 977-8583, Gaithersburg, Maryland (02)

FOR SALE: Kenwood TS-530S \$325
 Kenwood AT-230 Antenna Tuner \$135
 MC-50 Microphone \$20
 Trac Keyer \$15
 Bencher Paddle \$45
 MFJ 721 Audio Filter \$10
 OR take entire package for \$495
 Bill - WD4GOZ (410) 721-4255, Gambrills, Maryland (01)

WANTED: For ATV:

Video camera (without taping capability) or a camcorder; Also older cameras, especially Leica and the unusual; Also collect old fountain pens. Gerald Rose - KB4QGJ Phone (703) 370-1880, 524 N. Quaker Lane, Alexandria, VA 22304-1827. (06)

TRADE: Excellent Stamp Collection

Trade for 2-meter/FM rigs or scanners. Excellent (F, VF) USA used stamp collection in Harris catalog. Value over \$1500. Scott #29 alone lists at \$500. Several stamps prior to 1933 and 1933-1975 complete. Call Mel - WA3AGP (301) 490-3308, Laurel, MD (02)

WILL SWAP: My shipboard sound powered phones and other Navy memorabilia from WWII for your old vintage fountain pens, whether in working order or not. G.J. Rose - KB4QGJ, 524 North Quaker Lane, Alexandria, VA 22304 (703) 370-1880 (02)

STOCK QSL CARDS

100 \$14.00 - Shipping FREE

Send SASE for Samples

K3UAL Print, 1520 Jutewood Avenue
 Hyattsville, MD 20785
 Phone (301) 773-9383 or 773-5074
 (06)

AUTO-CALL POLICY

PRODUCTION POLICY

Copy for Auto-Call will be accepted in any form - handwritten, typed, compatible computer disk or modem. All hard copy is re-typed to preserve uniformity of style in the magazine. We use Word Perfect 5.1 word processing program, Hayes compatible modem (300 or 1200 baud) and can use either 3½" or 5¼" MS-DOS diskettes. We don't do Windows.

In determining space requirements, figure about 600 words per page (50 lines at 12 words per line), including the space taken up by headings, photographs, etc. Either black-and-white or color photos can be used as long as the contrast is good. Master copy, which is to be reproduced directly, should be in black ink on white paper and should be in proper page ratio. (Copy space is 7" wide by 9" high.) Copy can be reduced or enlarged as necessary.

Columns from Foundation member clubs are eagerly solicited and any items of general Amateur Radio interest are most welcome. The editor does reserve the right to edit or reject any portion of any copy submitted and to make minor changes to make copy fit available space.

SHACK SALES

Deadline for copy is the 5th of the month preceding the publication date. Shack Sales will **NOT** be accepted over the telephone. Full address must be provided for our reference but need not be published. Each ad must include the call sign or the full name of the advertiser. If the full address is not included, we prefer to include the city along with a telephone number so that readers will know whether a long-distance charge is involved. The entire telephone number - including city and state - is counted as only one word. We do not count postal zip codes. Otherwise, each word, abbreviation, model number or group of letter/numbers is counted as one word. Remittance must accompany each ad.

See next column for additional information on advertising. For further information, phone the Auto-Call editor at (703) 536-8469, McLean, VA.

ADVERTISING

SHACK SALES

Non-commercial advertising of Amateur associated equipment is available to subscribers of Auto-Call at 3¢ per word - with a \$1.00 minimum. Commercial vendors and non-subscriber rate is 17¢ per word - with a \$5.50 minimum.

Special headings or special spacing may be used (e.g., one item per line) but such ads are charged at a column inch rate - \$1.00 per column inch for non-commercial ads, \$5.50 per inch for commercial vendors and nonsubscribers.

Full name and address must be provided with each ad but need not be published. No ads will be accepted over the telephone. Since no effort is made to investigate advertisers, no warranty can be implied.

DISPLAY ADS

DISPLAY ADS are "boxed" and may contain artwork or photographs. They may be placed along with the Shack Sales or displayed in other sections of the magazine. Requests for specific locations will be honored if practical but cannot be guaranteed.

Display ads are charged according to size and duration of run as shown below. All advertising must be pre-paid for at least the current month.

		Rates per Issue			
Page	Col.inch	1 Year	6 Times	3 Times	1 Time
Full	18	\$75.00	\$90.00	\$100.00	\$105.00
1/2	9	55.00	65.00	71.00	75.00
1/3	6	40.00	46.00	51.00	54.00
1/4	4½	33.00	38.00	41.00	43.00
1/6	3	22.00	26.00	28.00	30.00
1/8	2¼	17.00	20.00	22.00	23.00
1/9	2	16.00	19.00	21.00	22.00
1/18	1	8.50	10.00	11.00	11.50

Based on camera-ready copy.
Extra charges for halftoning photos
and for in-house artwork or layout.

Copy must be received by the 5th of the month preceding publication date.
(e.g., Copy for November issue must be received by 5 October)

All Advertising Must be Pre-paid



JOIN ARRL

BENEFITS FOR YOU

QST, QSL Bureau Awards, Low Cost Insurance Operating Aids,
Government Liaison and More—Much More!

MEMBERSHIP APPLICATION

Name _____ Call _____

Street _____

City _____ Prov./State _____ PC/ZIP _____

\$30 in U.S. \$42 elsewhere (U.S. funds) Licensed amateurs or age 65 or over, upon submitting proof of age, may request special dues rate of \$24 in the U.S. \$36 elsewhere in U.S. funds. Persons age 17 and younger may qualify for special rates, write for application.

For postal purposes, fifty percent of dues is allocated to QST, the balance for membership.

VISA, MC, AMEX, Discover # _____

Signature _____ Expires _____

The American Radio Relay League
225 Main St. Newington, CT. 06111 USA AUTOCALL

Atlantic Division Director
Hugh Turnbull, W3ABC
6903 Rhode Island Avenue
College Park, MD 20740
Phone: (301) 927-1797

Roanoke Division Director
John Kanode, N4MM
Rt 1, Box 73-A
Boyce, VA 22620
Phone: 703-837-1340

AUTO-CALL Magazine

P.O. Box 7612
Falls Church, VA 22040

Please enter my NEW _____ RENEWAL _____ GIFT _____ subscription to Auto-Call

For 1 Year _____ 2 Years _____

Subscription rate: \$8.00 per year.

(Sample copy of latest issue \$1.00)

will be applied to subscription

NAME _____ CALL _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

Make check payable to the Foundation For Amateur Radio

FEBRUARY 1993

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 Adams County Dept of State	2 Antietam IBM PG Wireless	3 BARC MARC	4 Anne Arundel Summit Voice America	5 Mobileers Shennandoah	6 Green Mtn Stafford
7	8 Carroll Cnty PVRC	9 Frederick ARC Fauquier Woodbridge	10 Pentagon S.Patuxent --- FAR ---	11 AMRAD MADRAS Mt. Vernon No. Virginia	12 Alexandria So. Maryland Vienna	13 Stafford
14	15 Ole VA Hams Sterling Park	16 Antietam Arlington	17 BARC Goddard MARC	18 Anne Arundel QCWA #20	19 Rock Creek Shennandoah	20 Capital City Stafford
21	22	23 Columbia	24 Laurel QCWA #20	25 MADRAS St. Marys	26 Central MD Vienna	27 Stafford
28 WINTERFEST™ Adventists						

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